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SELF-IMPLEMENTING/PERFORMANCED BASED POLYCHLORINATED BIPHENLY REMOVAL

Former Peregrine Coldwater Road Facility
Genesee Township, Michigan

NOVEMBER 2000
REF. NO. 12636 (17)

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CFR	Code of Federal Regulations
CRA	Conestoga-Rovers & Associates
DOT	Department of Transportation
HDPE	High Density Polyethylene
IWPC	Inland Waters Pollution Control
LDR	Land Disposal Restriction
MDEQ	Michigan Department of Environmental Quality
PCBs	polychlorinated biphenyls
PPE	Personal Protective Equipment
ppm	parts per million
psi	pounds per square inch
RCRA	Resource Conservation and Recovery Act
REALM	Remediation and Environmental Liability and Management, Inc.
Report	Certification Report
Site	Former Peregrine Facility, Coldwater Road, Flint, Michigan
SOW	Scope of Work
TSCA	Toxic Substances Control Act
U.S. EPA	United States Environmental Protection Agency
Work Plan	Removal, Disposal, and Decommissioning Work Plan

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1.0 INTRODUCTION

1.1 GENERAL

This document presents the Final Certification Report (Report) which describes the voluntary removal of Polychlorinated Biphenyl (PCBs) items from the Former Peregrine Coldwater Road Facility located at 1245 Coldwater Road, Genesee Township, Michigan (Site) and certifies the completion of such activities in accordance with the PCB Mega Rules (40 CFR Part 761). This implementation was conducted during the period from February 12, 2000 to , XXXX,XX, 2001 with final shipment of material for disposal continuing until (XXXX), 2001??. The Implementation involved the removal of PCB Light Ballasts, PCB Transformers, PCB Capacitors, PCB Oil Blast Breakers, Impacted Concrete, Impacted Sand, and Impacted Limestone.

The Site location is presented on Figure 1.1. The general layout of the Site is presented on Figure 1.2.

1.2 PROJECT BACKGROUND

The Former Peregrine site is located at 1245 East Coldwater Road in Genesee Township, Michigan. In past operations the plant produced interior components for cars and light trucks. Major historical operations included stamping, welding and miscellaneous assembly of automotive components. The Facility began operations in 1953 and ceased operation late spring 1998.

The facility consists of a manufacturing complex of four main structures. The structures include: a 1.97 million square foot machining and assembling building (Building 44); a storage building (Building 63); a powerhouse, and an administrative building.

The main manufacturing building is a two-story steel-framed structure. Just to the south, connected by a common wall stands the Administrative Office Complex. Together they total 1,900,000 million square feet of floor space.

Building 63 is a steel frame, warehouse-type structure that was once used for floor space of spare chemicals, waste drums, and scrap metal parts.

The Powerhouse consists of several coal and natural gas boilers. The powerhouse is a steel and brick framed structure that still has the brick stack for the coal exhaust.

1.3 BASIS FOR WORK PLAN

The basis of this work was to identify any suspect areas where PCBs may have been used throughout the facility prior to demolition as a part of the decommissioning activities. Also, the goals were to characterize these suspect areas/equipment, remove/decontaminate, and dispose of these items in accordance with 40 CFR 761.

In addition, CRA prepared a Focused Building Decommissioning Assessment Report dated January 2000. The BDA report identified suspect areas and electrical equipment that may have been associated with PCB's. According to past plant personnel, all of the PCB electrical equipment was reclassified as non-PCBs in the 1980's. CRA located documentation that some of the electrical equipment in the past did contain PCBs in exceedance of 500 ppm PCBs, and was found that this electrical equipment was retrofitted with non-PCB oils. But, documentation could not be found to assure operating temperatures, and a 90-day in-service requirement was met. CRA recommended that all PCB associated electrical equipment and oils should be sampled to determine disposal in accordance with 40 CFR 761.70 and 40 CFR 761.75.

After reviewing analytical results VRA recommended the removal of several PCB and non-PCB containing Light Ballasts, PCB and non-PCB containing Transformers, PCB and non-PCB containing Breakers, and any PCB impacted matrix associated with historical operations of this equipment (i.e. spills, soil, concrete, waste streams).

As part of identifying suspect PCB areas, CRA Field personnel screened specific locations by collecting PCB indicator wipe samples. The locations of these samples were governed by the location of specific equipment and items that may have been associated with PCB's either in the past or present. Some of these items and locations include stained areas (porous and non-porous surfaces) adjacent to electrical equipment such as transformers, capacitors, regulators, air compressors, gas lines, and oily spills and residues. Each wipe sample was collected as 10 cm by 10 cm surfical samples; however, due to the inconsistent shapes this was not always possible. In these cases, an equivalent area of 100 cm^2 was used.

These samples were collected as a guideline to identify potentially PCB impacted areas. In all, one hundred and forty two (142) indicator PCB wipe samples were collected as part of the BDA and are summarized in Table 1.3. The locations of these indicator PCB wipe samples are shown on Drawing No. 2.

In addition to the indicator wipe samples, the BDA report summarizes over two hundred and twelve (212) additional samples that were collected and analyzed for PCBs.

These samples were part of the Standard Operating Procedures for identifying additional PCB impacted materials. Samples were collected and analyzed for PCBs on every single sludge, solid, and liquid sample.

If an area was identified to be impacted, additional cleanup site characterization sampling was completed. This sampling was collected in accordance with 40 CFR 761 Subpart N, and is described in the individual sections below. These Characterization Samples were the basis for identifying the quantities of the PCB material for disposal, and defined the limits for removal. After identifying theses impacted areas, the items were removed.

Inland Waters was hired to complete removal. Conestoga-Rovers and Associates assured that the contractor removed these items did so with respect to the Toxic Substances Control Act (TSCA) regulations as presented in 40 Code of Federal Regulations (CFR) Part 761 (PCB Rules).

After the removal of the impacted items, CRA collected verification samples to assure completion of the removal (40 CFR 761 Subpart O). These procedures are also described in the sections below.

1.4 REPORT ORGANIZATION

This Report is organized into the following sections:

i) Section 1.0 presents the Site location and background, the basis for the Work Plan, and the organization of the Report;

ii) Section 2.0 presents a summary of the Scope of Work (SOW) for the Work Plan implementation;

iii) Section 3.0 presents details of on-Site project management including implementation personnel, contractor and subcontractors, and Site security;

iv) Section 4.0 presents details of the removal of the PCB-containing Transformers, Oil- Breakers, Potheads, Bushings, Potential Transformers, and Capacitors;

v) Section 5.0 presents details of the removal of PCB-impacted concrete from the Basement Fan Room;

vi) Section 6.0 presents details of the removal of PCB-containing Light Ballasts;

vii) Section 7.0 presents details of the removal of PCB-impacted concrete from Fan Room #3;

viii) Section 8.0 presents details of the removal of PCB-impacted concrete from Fan Room #13;

ix) Section 9.0 presents details of the removal of PCB-impacted wood block flooring, concrete, and sand;

x) Section 10.0 presents details of the removal of PCB-impacted limestone from the Master Switch Yard;

xi) Section 11.0 presents details of the removal of PCB-impacted concrete from Substation #1 (1A);

xii) Sections 12.0 describes the sampling of the Natural Gas Lines for PCBs;

xiii) Section 13.0 describes the sampling of miscellaneous suspect items for PCBs;

xiv) Section 14.0 describes the procedures for equipment decontamination;

xv) Section 15.0 describes work in the Administrative Building;

xvi) Section 16.0 describes the final summary, and conclusions;

This Report includes the following appendices:

Appendix A	Photographic Documentation of Work Plan Implementation
Appendix B	Waste Disposal Manifests and Certifications for PCB Light Ballasts
Appendix C	Waste Disposal Approval/Characterizations
Appendix D	Waste Disposal Manifests and Certifications
Appendix E	CRA Data Quality Assessment and Validation Memo
Appendix H	Sampling Analytical Data

The Text, Figures, Tables, and Appendices A through H are included in Volume I of this Report. Volume II contains Appendix I (Sampling Data).

2.0 SCOPE OF WORK PLAN

This Section provides a summary of characterization sampling, removal, decontamination, verification sampling, and disposal activities that were conducted at the Site consistent with the Work Plan. The materials removed from plant were placed in roll-off boxes and 55-gallon drums for temporary storage pending off-Site disposal, or placed in DOT Approved Vehicles and sent directly off Site for disposal. Following removal of PCB items, the associated equipment was decontaminated in accordance with the Work Plan. After the removal of the impacted material, verification samples were collected. Specific activities conducted to complete the Work Plan included the following:

- mobilization of contractors and setup of equipment;
- indicator wipe sampling of assumed PCB impacted areas;
- characterization sampling;
- delineation of work zones and decontamination areas;
- removal of PCB oils from Transformers, Capacitors, and Switchgear items;
- removal of PCB Light Ballasts;
- removal of impacted concrete;
- removal of impacted soil media;
- transportation of material in roll-off boxes, tankers, and 55-gallon drums for disposal at TSCA and, in certain cases, RCRA permitted landfills or incinerators;
- transportation of material via DOT Approved Vehicles to TSCA permitted landfills;
- decontamination of other PCB containers, transportation units, and associated equipment;
- Characterization/verification sampling of concrete in Sub-Station 1A, concrete in Fan Room 3, concrete in Fan Room 13, concrete and soil in the Basement Fan Room, concrete and soil in Bay P16, and the soil in the Master Switchyard.
- Demobilization of equipment, materials, facilities, and personnel.

All work activities completed during this Implementation were conducted at the Site in a manner designed to maintain the integrity of existing structures and equipment, and minimize the risk of potential impact to human health, welfare, and the environment.

3.0 PROJECT MANAGEMENT

3.1 GENERAL

Table 3.1 summarizes project personnel on Site during implementation of the Work Plan. Additionally, Figure 3.1 presents the generalized project organization chart.

3.2 WORK PLAN CERTIFICATION AND OVERSIGHT

Conestoga-Rovers & Associates (CRA) of Romulus, Michigan was retained by REALM to provide oversight and third party certification that the PCB removal activities conducted at the Site were in accordance with the Work Plan. CRA's responsibilities included liaison with REALM management personnel, and liaison with, and inspection of contractor and subcontractor activities to ensure that this Implementation was properly implemented. Representatives from CRA were on Site during all critical Work Plan implementation activities ranging from personnel mobilization through demobilization.

3.3 CONTRACTOR/SUBCONTRACTORS

The contractor retained by REALM to implement the removal of the PCB-containing Transformers, Capacitors, and Oil Breakers was SunOhio of Canton, Ohio. Trans-Cycle Incorporated (TCI) of Pell City, Alabama was subcontracted and limited by contract to transport bulk PCB liquids and electrical equipment to an approved facility. The contractor retained by REALM to implement the Cleaning Work Plan was Inland Waters Pollution Control (IWPC) of Detroit, Michigan. IWPC retained National Abatement (Flint, Michigan) as a general subcontractor to help complete the Work Plan activities for removal of the Light Ballasts. National Abatement's contract was limited to the removal of the Light Ballats from the second floor of building 44. Also, Entech Services was hired as subcontractor for IWPC to work side by side on the PCB cleaning/decommissioning portion of the contract. A portion of the work was also performed by CRA personnel including:

- overall project management and coordination of contractors;
- coordination of all transportation vehicles;
- waste characterization based upon Site records and sampling;
- indicator wipe, characterization, and verification sampling;

- daily inspections of roll off boxes, tankers, and 55-gallon drums before transportation off Site.

In addition, CRA retained the following subcontractors during the implementation of the Work Plan;

- CT&E Environmental Testing Services from Ludington, Michigan provided laboratory services for characterization and confirmatory sample purposes;
- Safety Kleen from Burton, Michigan provided approved DOT containers for temporary storage and transportation of hazardous solid wastes. Also Safety Kleen transported the material to an approved landfill.

3.4 PROJECT DOCUMENTATION AND MONITORING

CRA maintained a daily Site logbook for documentation of all activities that occurred at the Site. Other records which were maintained on Site on a daily basis included weather conditions, on-Site personnel, visitors, work activities conducted, air monitoring, disposal details, and disposal manifests.

3.5 SITE SECURITY

Site security was maintained throughout the duration of the Work Plan implementation by CRA. As part of CRA's operating practices, security guards are posted at the main security gate 24 hours per day, 7 days per week. The security guards maintain a Site visitor log. The Site is surrounded by a 6-foot high chain link fenced. The fence was inspected periodically by CRA's security personnel to determine if the fence has been breached. No security issues occurred during the implementation of the Work Plan.

4.0 TASK 1: REMOVAL OF PCB TRANSFORMERS, BREAKERS, CAPACITORS, AND ELECTRICAL SWITCHGEAR EQUIPMENT

This section includes the removal of liquids in electrical equipment such as transformers, oil-breakers, capacitors, and switchgear reservoirs. This removal work was sub-contracted to SunOhio and National Abatement. Everyday a safety tailgate meeting was held to include possible hazards and key points. Also, daily assignments were delegated to working individuals. This portion of the PCB removal began on November 8, 1999 and lasted through January 3, 2000, then again in September **, 2000 through October **, 2000. TCI, who worked closely with SunOhio transported and disposed the bulk liquid and solid electrical equipment. In addition, Adamo Inc. was contracted to salvage the non-PCB transformers. Drawings No. 1 identifies the location of the these removed electrical items. The following sections describe the implemented removal of these items.

4.1 REMOVAL OF PCB TRANSFORMERS

A total of 35 roof top transformers outside on building 44, 5 platform transformers inside building 44, and 8 outside transformers next to the Main Switchyard were removed. As summarized in Table 4.1, the serial number, the location, the weight, and the total amount of liquids from each transformer is presented. In all a total of ******* gallons of oil, and ****** pounds of equipment were disposed.

SunOhio began by working on the roof top transformers then continued on with the platform transformers in Building 44. All the transformers were de-energized, grounded, and locked out. From the rooftop, hatchways were opened up in each substation. TCI and SunOhio built a secondary spill containment in the roof top substations and directly below the hatchways in order to contain potential releases while removing liquids. After CRA field staff confirmed that the tanker truck was properly labeled, it was driven above of the secondary containment and below the hatchway. Personnel wearing the appropriate PPE confirmed that the hoses were placed in plastic sleeves that ran from the transformer spigots to the tanker truck valves were connected and secured. Valve operations was confirmed, and liquids were drained from the unit into the tanker. At all times a two-way radio was used to communicate with personnel on the roof and the main floor. After the completion of draining the unit, the coils and the hoses were capped and then taken on to the next transformer for use.

In addition, SunOhio prepared for the dismantling of the electrical equipment. Beneath each substation a receiving area was prepared by erecting a secondary containment with a perimeter fence. All lifting equipment on the transformers were confirmed secured. Above each substation a lifting device was attached to the overhead rails. Each transformer was jacked up and placed on a skid and rolled to the vicinity of the rails adjacent to the hatchway. Several slings, straps, and harnesses were attached, and each transformer was lowered to floor on to 4" by 4" beams above the secondary containment. During the lowering, radio contact was kept with the technician on the floor and the technician in the substation. The access routes were confirmed clear and no personnel were allowed within 20' of the drop zone. After the each transformer was confirmed secure, the slings, straps, and harnesses were removed. An inspection was performed by CRA for any leaks, fluid spots, and proper labeling.

TCI mobilized flat bed tractor trailers ("Low-Boys") in order to transport the drained equipment, SunOhio picked p each transformer with an appropriate rated skidster (fork lift), and loaded them onto the trailer. The units were properly strapped down and shipped to Pell City Alabama for disposal.

The two overhead electrical transformers inside substation 14 in building 44 did not contain oil. These units were drained and left in place for scrap metal. The four transformers and the four step-down regulators in the main switchyard were oil filled. These oil in these unites were collected and analyzed for PCBs. The analytical results indicated that all of the oils in this equipment contained PCBs but less than 10 ppm. These oils were drained by SunOhio and transported to Edwards Oil Facility, Detroit, Michigan for recycling. The electrical was left in place for scrap metal.

4.2 REMOVAL OF PCB CAPACITORS

A total of 319 individual PCB Capacitors were removed from the facility. These banks of capacitors included several of the fan rooms, substations, next to air-units, and in the basement of the Powerhouse.

Before the removal of each capacitor, the location was set-up with secondary containment, and the appropriate equipment. Each unit was de-energized, and electrical contacts were disconnected. The oil from capacitors were drained into 55-gallons drums, while the housing for each unit was placed into another 55-gallon drum. Once each drum was sealed and labeled, it was transported over to the temporary staging area. As soon as CRA field personnel arranged for transportation, the loading of the drained electrical equipment was approved and carried out.

A description of the quantity and location of the PCB capacitors that were removed are summarized in table 4.3. The transportation and disposal of this material is described in Section 15.0.

4.3 REMOVAL OF PCB BREAKERS AND RELATED SWITCHGEAR ITEMS

Each substation housed several pieces of electrical equipment that used oil for cooling, insulating, and surge protecting purposes. A total of 12 potential transformers, 79 potheads, 21 bushings and 15 oil-breakers were drained, removed, and disposed. After the removal of this equipment all of the items were staged and sampled.

A description of the potential transformers, potheads, bushings, and oil-breakers that were removed are summarized in Table 4.3 The transportation and disposal of this material is described in Section 15.0.

4.4 LOCATING CHARACTERIZATION/VERIFICATION SAMPLES

Indicator wipe sampling was performed after the removal of the transformers, capacitors, bushings, potential transformers, potheads, and oil circuit breakers. These wipe samples were collected prior to any characterization sampling took place. Collecting these wipe samples were relatively easy which saved on time and money. In addition, these samples indicated if PCBs were present at specific locations. As mentioned before, these wipe sample results are summarized in Table 1.3. According to the analytical results, the indicator wipe samples dictated that characterization sampling be necessary to delineate these potential areas.

The following summarizes areas and Figure numbers in which characterization cores were collected based upon indicator wipe sample analytical results:

Figure Numbers	*Area of Characterization/Verification Sampling*
Figure 4.1	Substation 1 Transformer Pad-Building 44(2nd floor)
Figure 4.2	Substation 2 Transformer Pad-Building 44(2nd floor)
Figure 4.3	Substation 4 Transformer Pad-Building 44(2nd floor)
Figure 4.4	Substation 6 Transformer Pad-Building 44(2nd floor)
Figure 4.5	Substation 7 Transformer Pad-Building 44(2nd floor)
Figure 5.0	Basement Fan Room- Building 44
Figure 7.0	Fan Room 3- Building 44(2nd floor)
Figure 8.0	Fan Room 13- Building 44(2nd floor)
Figure 9.0	Bay P16- Building 44
Figure 10.0	Master Switchyard- Primary Substation
Figure 11.0	Substation 1A- Building 44(2nd floor)

A confirmation grid was established in each Substation Transformer Pad in Building 44. Samples were collected at five-foot interval over the six hundred square foot surface area of each Pad. According to the analytical results, the Substation Transformer Pads in Building 44 were not impacted by PCBs and could be left in place. The analytical results of these samples are summarized in Table 4.4 the locations of these samples are shown on Tables 4.1 through Table 4.5.

Once it was determined what areas were impacted, additional items were removed (i.e. concrete) and verification samples were collected to demonstrate the effectiveness of performance based disposal of PCB remediation waste activities in accordance with 40 CFR Part 761.61 ((b)). These activities are described in Sections 5.0, 7.0, 8.0, 9.0, 20, and 11.0.

5.0 TASK 2: SAMPLING AND THE REMOVAL OF PCB IMPACTED CONCRETE IN THE BASEMENT FAN ROOM

The Basement Fan room is located underneath building 44. A total of six capacitors were hung on the southern cinder-block wall. These items were removed from this location. After removal of these units, characterization samples were collected to identify if there were any historical spills. It was identified that PCB's impacted an area on the concrete floor. The concrete was removed, and verification sampling indicated that the removal was a success. The analytical results and locations are summarized in Table 5.0. Figure 5.0 displays the location of these samples.

5.1 CHARACTERIZATION SAMPLING (40 CFR SUBPART N)

On December 12, 1999, six concrete core samples were taken directly beneath each capacitor on the concrete floor. The samples described are samples 214, 215, 216, 217, 218, and 219.

The concrete verification consisted of 1-inch diameter cores drilled to a depth of approximately 1-inch below the surfaces using a hammer drill and a 1-inch drill bit. The drill bits were decontaminated between each sample. The concrete samples were collected, placed in pre-cleaned sample jars, labeled, and submitted to CT&E for PCB analysis.

Sample C-12636-121799-MM-219 had an analytical result of 2.8 ppm that exceeded the 1.0 ppm criteria for the PCB removal standard for this location. According to this data, concrete on the floor within the basement Fan Room had to be removed. The concrete identified was approximately 5 feet by 10 feet by 6 inches thick.

5.2 REMOVAL OF CONCRETE IN THE BASEMENT FAN ROOM

Inland Waters Marine Pollution Controls, Inc., sub-contracted this portion of the work to Entech Services. The work began and ended on March 1, 2000. Entech Services built an encapsulating secondary containment for dust control. The encapsulation was built with plastic tarps and a wooden frame.

Several technicians cut out a 5' by 10' section of concrete flooring using a concrete-saw. A vacuum with a HEPA filter was attached to the front end of the saw in order to minimize dust. All associated PPE, secondary containment, and concrete dust collected

by the vacuum were placed inside the USPCI roll-off boxes. The equipment was decontaminated as described in Section 14.0.

5.3 VERIFICATION SAMPLING (40 CFR 761 SUBPART O)

Several verification samples were collected after the removal of the PCB impacted concrete in the Basement Fan Room. Four samples were collected within the concrete that remained in place adjacent to the removed concrete. On March 2, 2000, a total of 4 concrete core samples were collected. One sample on west, another on the east, and two just north. The concrete verification samples consisted of 1-inch diameter cores drilled to a depth of approximately 1-inch below the surfaces using a hammer drill and a 1-inch drill bit. The drill bits were decontaminated between each sample. The concrete samples were collected, placed in pre-cleaned sample jars, labeled, and submitted to CT&E for PCB analysis.

In addition to the concrete sampling, three sand samples were collected to identify if any penetration of PCB oils impacted the sand underneath the concrete flooring. According to the analytical results, both the sand and concrete cores were below the PCB removal standard of ≤1 mg/kg and met the criteria for this location. This indicated that the removal of the concrete was successfully completed. Information on transportation and disposal is described in Section ##.

6.0 TASK 3: REMOVAL OF PCB LIGHT BALLASTS

A contract was awarded to Inland Waters Marine Pollution Controls for the removal of PCB Light Ballasts from Building 44, Building 63, and the Powerhouse. Inland Waters sub-contracted the second story of Building 44 to National Abatement. The work began on February 11, 2000, and ended on April 23, 2000. A total of 8,461 individual light ballasts were removed, packaged, temporary stored, and transported and disposed by Safety Kleen to an approved facility. Appendix C contains a copy of the fully executed waste manifests. The summaries of 55-gallon drum unique ID's total shipping weight, and out of service dates are summarized in Table 6.0.

6.1 REMOVAL, STORAGE, TRANSPORTATION, AND DISPOSAL

To complete the work, Inland Waters mobilized six man-lifts in order to reach the light fixtures. Every single light fixture was manually removed from the ceiling and brought down to the ground floor. There the fixtures were collected, land loaded onto a state truck. Once the truck was full it was driven over to a designated area with secondary containment where the ballasts could be manually separated from the fixtures.

Each 55-gallon drum was prepared by pouring about 2 lbs. of floor dry on the bottom, and then ballasts were placed into the drum not to exceed 750-lbs. total weight for each drum. If leaky ballast was found, it was placed into two polyethylene bags, then placed into a separate drum marked "leakers". Note that no leakers were found. More floor dry was sprinkled on the top of the drum, then the drum was sealed and labeled.

A unique identification was given to every drum that was sealed and labeled. Also, the drum was given an "out of service" date for the ballasts that were placed inside that drum. On the average, around 16 drums were completed a day. A total of 370 drums were filled with PCB ballasts.

When a total of 40 drums were filled and logged in, CRA contacted Safety Kleen to load, transport, and dispose of them. Safety Kleen made various trips to the site during this portion of the project. The fully executed waste manifests for the PCB Ballast removal is summarized in Appendix D. The detailed transportation and disposal is described in section 14.0.

7.0 TASK 4: SAMPLING AND REMOVAL OF IMPACTED CONCRTETE IN FAN ROOM 3

Fan room 3 is located on the second story of Building 44. Inside this fan room sat one capacitor mounted to beams secured in the concrete adjacent to the fan ductwork. After removal of these units, indicator wipe samples were collected to identify if there were any historical spills. According to the wipe sampling, it was identified that an area on the floor was impacted by PCB's. The concrete was removed, and verification sampling indicated that the removal was a success. The analytical results and locations are summarized in Table 7.0. Figure 7.0 displays the location of these samples.

7.1 CHARACTERIZATION SAMPLING (40 CFR SUBPART N)

Originally, wipe samples were collected on September 28, 2000. A wipe sample W-12636-092800-MM-053, indicated that additional concrete core sampling would be necessary to qualitatively quantify the contamination.

On November 30, 1999, six concrete core samples were taken directly beneath a large capacitor on the concrete floor. The samples described are samples 187, 188, 189, 190, 191, and 192. In addition to these samples, two other samples were collected to delineate the extent of impacted. These samples (223, 224) were collected on January 27, 2000.

The concrete verification samples consisted of 1-inch diameter cores drilled to a depth of approximately 1-inch below the surfaces using a hammer drill and a 1-inch drill bit. The drill bits were decontaminated between each sample. The concrete samples were collected, placed in pre-cleaned sample jars, labeled, and submitted to CT&E for PCB analysis.

Sample C-12636-113099-MM-187 had an analytical result of 2.6 ppm that exceeded the 1.0 ppm criteria for the PCB removal standard for this location. According to this data, concrete on the floor of Fan Room 13 had to be removed. The concrete identified was approximately 10 feet by 8.5 feet by 6 inches. This fan room was located on the second story of Building 44.

7.2 REMOVAL OF CONCRETE IN FAN ROOM 3

Inland Waters Marine Pollution Controls, Inc., sub-contracted this portion of the work to Entech Services. The work on February 27, 2000, and ended on March 1, 2000. Entech Services built an encapsulating secondary containment for dust control. The encapsulation was built with plastic tarps that were draped around a USPCI roll-off box, an extended all the way to the floor of the second story beneath Fan Room 3.

Several technicians cut out a 10′ by 8.5′ section of concrete flooring using a concrete-saw. A vacuum with a HEPA filter was attached to the front end of the saw in order to minimize dust. The concrete was allowed to free fall down to the roll-off box within the encapsulation that was constructed. All the associated PPE, and dust collected from the sawing was placed in to the roll off box as well. Finally, the encapsulating material (polyethylene) was placed in to the roll-off box last. The equipment was decontaminated as described in Section 14.0.

7.3 VERIFICATION SAMPLING (40 CFR 761 SUBPART O)

Several confirmation samples were collected after the removal of the PCB impacted concrete in Fan Room 3. Three samples were collected along the concrete that remained in place adjacent to the removed concrete. On March 2, 2000, a total of four concrete core samples were collected. One sample on the south, two towards the east, and one to the north (respectively, samples 236, 237, 238, and 239).

The concrete verification samples consisted of 1-inch diameter cores drilled to a depth of approximately 1-inch below the surfaces using a hammer drill and a 1-inch drill bit. The drill bits were decontaminated between each sample. The concrete samples were collected, placed in pre-cleaned sample jars, labeled, and submitted to CT&E for PCB analysis.

According to the analytical results, the concrete cores were below the PCB removal standard of ≤1 mg/kg and met the criteria for this location. This indicated that the removal of the concrete was successfully completed. Information on transportation and disposal is described in Section 15.0.

8.0 TASK 5: SAMPLING AND REMOVAL OF IMPACTED CONCRTETE IN FAN ROOM 13

Fan room 13 is located on the second story of Building 44. Inside this fan room sat two capacitors mounted to beams secured in the concrete adjacent to the fan ductwork. After removal of these units, concrete samples were collected to identify if there were any historical spills. According to the verification sampling, it was identified that PCBs impacted an area on the floor. The concrete was removed, and verification sampling indicated that the removal was a success. The analytical results and locations are summarized in Table 8.0. Figure 8.0 displays the location of these samples.

8.1 CHARACTERIZATION SAMPLING (40 CFR SUBPART N)

Originally, wipe samples were collected on September 28, 2000. The sample W-12636-092800-MM-063B indicated that additional concrete core sampling would be necessary to qualitatively quantify the contamination.

On November 30, 1999, six concrete core samples were taken directly beneath a large capacitor bank on the concrete floor. The samples described are samples 193, 194, 195, 196, 197, and 198. In addition to these samples,

The concrete verification samples consisted of 1-inch diameter cores drilled to a depth of approximately 1-inch below the surfaces using a hammer drill and a 1-inch drill bit. The drill bits were decontaminated between each sample. The concrete samples were collected, placed in pre-cleaned sample jars, labeled, and submitted to CT&E for PCB analysis.

Sample C-12636-113099-MM-187 had an analytical result of 2.6 ppm that exceeded the 1.0 ppm criteria for the PCB removal standard for the site. According to this data, concrete on the floor of Fan Room 13 had to be removed. The concrete identified was approximately 9 feet by 11 feet by 6 inches.

8.2 REMOVAL OF CONCRETE IN THE BASEMENT FAN ROOM

Inland Waters Marine Pollution Controls, Inc., sub-contracted this portion of the work to Entech Services. The work began on February 25, 2000, and ended on February 28, 2000. Entech Services built an encapsulating secondary containment for dust control. The

encapsulation was built with plastic tarps that were draped around a USPCI roll-off box, an extended all the way to the floor below Fan Room 13.

Several technicians cut out a 9' by 11' section of concrete flooring using a concrete-saw. A vacuum with a HEPA filter was attached to the front end of the saw in order to minimize dust. The concrete was allowed to free fall down to the roll-off box within the encapsulation that was constructed. All the associated PPE, and dust collected from the sawing was placed in to the roll off box as well. Finally, the encapsulating material (polyethylene) was placed in to the roll-off box last. The equipment was decontaminated as described in Section 14.0.

8.3 VERIFICATION SAMPLING (40 CFR 761 SUBPART O)

Several confirmation samples were collected after the removal of the PCB impacted concrete in Fan Room 3. Three samples were collected along the concrete that remained in place adjacent to the removed concrete. On March 2, 2000, a total of 3 concrete core samples were collected. One sample on the south, another on the east, and one to the north (respectively, samples 233, 234, and 235). In addition to the concrete core samples, verification samples were collected from the sand that was underneath the removed concrete.

The concrete verification samples consisted of 1-inch diameter cores drilled to a depth of approximately 1-inch below the surfaces using a hammer drill and a 1-inch drill bit. The drill bits were decontaminated between each sample. The concrete samples were collected, placed in pre-cleaned sample jars, labeled, and submitted to CT&E for PCB analysis.

According to the analytical results, the concrete cores and sand samples were below the PCB removal standard of ≤1 mg/kg and met the criteria for this location. This indicated that the removal of the concrete was successfully completed. Information on transportation and disposal is described in Section 15.0.

9.0 TASK 6: SAMPLING AND REMOVAL OF IMPACETED MATERIAL IN BAY P-16 (BUILDING 44)

During the initial Building Decommissioning Assessment, several samples were collected from oil stained wood block flooring and were analyzed for PCB's. On October 14, 1999, sample WB-12636-101499-SM-135 was collected and sent to CT&E for analysis. The results indicated that the wood block flooring contained 2.6 ppm PCB's. On November 30, 1999, three additional samples (183, 184, and 185) were collected to delineate the extent of the concrete underneath the flooring.

According to the data, approximately 13 cubic yards of wood block flooring were identified to have concentrations of polychlorinated biphenyls (PCBs) ranging from 0.54 to 11 parts per million (ppm). The removal will be conducted in accordance with the performance based disposal provisions contained in Title 40 of the Code of Federal Regulations (CFR), Part 761.61 (b). The wood block flooring was located in a 45 x 45-foot bay near column P16 of the main manufacturing building (Building 44).

9.1 WOOD BLOCK FLOORING REMOVAL

Inland Waters was retained to remove the wood block flooring, and load the material into containers suitable for off-Site transportation. A front-end loader was utilized to collect and remove the wood block. Care was taken to minimize the amount of dust generated during the removal process by minimizing agitation during removal. The contractor provided and installed a double layer of polyethylene lining in the disposal container (container provided by REALM). After all wood block flooring was removed, the contractor collected residual dust or debris using mechanical means such as push brooms. The dust and debris were placed in the same container as the wood block for disposal. Any equipment used were properly decontaminated or placed in the container for disposal with the wood block flooring, as described in Section 14.0. Once all wood block flooring and debris were removed, CRA performed confirmation/verification sampling of the underlying concrete.

9.2 CHARACTERIZATION SAMPLING OF CONCRETE UNDERNEATH WOOD BLOCK FLOORING IN BAY P-16 (40 CFR 761 SUBPART O AND M)

Confirmation sampling to demonstrate the effectiveness of performance based disposal of PCB remediation waste activities in accordance with 40 CFR Part 761.61(b)) was performed. Wood block flooring with PCB concentrations ranging from 0.54 to 11 parts

per million (ppm) was removed for disposal by Inland Water Pollution Control/MPS Group Inc. in accordance the wood block flooring was contained in a 45x 45-foot bay near column P16 of the main manufacturing building (Building 44). _Verification sampling was performed in accordance with the Toxic Substance Control Act (TSCA), 40 CFR Part 761, and Subpart O.

A sampling grid was established over the 45x 45-foot area near column P16. The grid consisted of 5 x 5-foot squares. Sub-samples were collected from each of the 5x 5-foot squares. Concrete cores will be collected from three vertical strata (3, 6, and 9-inches below the surface of the concrete). The laboratory was instructed to hold the 6 and 9-inch cores pending the analytical results of the 3-inch cores. Nine sub-samples representing a larger 15x 15-foot square will be composited for each vertical strata. The sample locations are indicated in Figure 9.0, where Table 9.0 summarizes the analytical results.

Equal volumes of sub-sample concrete were composited in the field and placed in glass jars. The jars will then be placed on ice in a cooler for transportation to CT&E Environmental Services, Inc. for analysis. Sampling equipment was decontaminated in accordance with 40 CFR 761.79(c)(2). Surfaces were swabbed with a solvent and double wash/rinsed after all nine cores have been collected from each 15x 15-foot square. The concrete samples were analyzed in accordance with SW-846 8082.

After reviewing the analytical data, the samples composited in grid "311" were above the criteria allowed for the site. Also, the additional samples at 6 inches and 9 inches were analyzed and indicated elevated results for PCBs (samples 311A, 311B, and 311C).

9.3 ADDITIONAL CHARACTERIZATION SAMPLING OF CONCRETE NORTH OF BAY P-16

According to the analytical data, concrete had to be removed from bay P-16. Sample area "311" was bounded to the north by concrete that was not sampled. Three additional samples were collected and analyzed to determine the extent of the impacted concrete. To comply, these samples were collected at five foot intervals off the main gird system as an extension of the sampling (samples 480, 481, and 482). This additional concrete was removes using the procedures as above. After the removal of the extra concrete, four final samples (samples 489, 490, 491, and 492) were collected that verified that the horizontal extent of impacted concrete was removed.

In addition to the extra concrete core sampling and removal, samples of the media underneath the concrete were collected to assure there was no vertical penetration

through the concrete. Samples 468 through 476 were located in the same 5-foot grid configuration. According to the analytical results, sample 475 did not meet the clean-up criteria having an analytical result of 7.2 ppm. After the removal of this impacted sand (5-foot by 5-foot by 1-foot deep), two additional samples were collected an analyzed. According to all the analytical results, the concrete cores and sand samples were below the PCB removal standard of ≤1 mg/kg for this location. This indicated that the removal of the concrete was successfully completed. Information on transportation and disposal is described in Section 15.0.

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10.0 TASK 7: REMOVAL OF IMPACTED MATERIAL IN MAIN SWITCHYARD

INCOMPLETE

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11.0 TASK 8: SAMPLING AND REMOVAL OF CONCRETE IN SUBSTATION 1A

Substation 1A is located within Substation 1 on the second story of Building 44. During a visual inspection, oil stains were noticed on the concrete floor associated around electrical equipment within Substation 1A. According to the confirmation sampling, it was identified that PCBs impacted an area on the floor. The concrete was removed, and verification sampling indicated that the removal was successful. The analytical results and locations are summarized in Table 11.0. Figure 11.0 displays the location of these samples.

11.1 CHARACTERIZATION SAMPLING (40 CFR SUBPART N)

On March 19, 2000, an indicator wipe sample was collected from the oil stained concrete in Substation 1A. Sample W-12636-031900-BS-270 was collected and sent to CT&E for PCB analysis. In addition to the wipe sample, a confirmation concrete sample was collected within the metal curbed area. Both of these samples indicated that the concrete within the metal secondary containment was impacted. Since substation 1A was completely surrounded by this secondary containment (metal curbing), it was assumed that all the concrete within the curbed area was impacted.

11.2 CONCRETE REMOVAL

Inland Waters Marine Pollution Controls, Inc., sub-contracted this portion of the work to Entech Services. The work began and ended on March 1, 2000. Entech Services built an encapsulating secondary containment for dust control. The encapsulation was built with plastic tarps that were draped around a USPCI roll-off box, an extended all the way to the floor below Substation 1/1A.

Several technicians cut out a 12' by 9' section of concrete flooring using a concrete-saw. A vacuum with a HEPA filter was attached to the front end of the saw in order to minimize dust. The concrete was allowed to free fall down to the roll-off box within the encapsulation that was constructed. All of the associated electrical equipment within Substation 1A, PPE, and dust collected from the sawing was placed in to the roll off box as well. Finally, the encapsulating material (polyethylene) was placed in to the roll-off box last. The equipment was decontaminated as described in Section 14.0.

11.3 ADDITIONAL CHARACTERIZATION/VERIFICATION SAMPLING AND CONCRETE REMOVAL (40 CFR 761 SUBPARTS O AND M)

Several verification samples were collected after the removal of the PCB impacted concrete and electrical equipment. On March 3, 2000 four concrete core samples were collected adjacent to the metal curbing that separated Substation 1A from Substation 1 Switchroom.

The concrete verification samples consisted of 1-inch diameter cores drilled to a depth of approximately 1-inch below the surfaces using a hammer drill and a 1-inch drill bit. The drill bits were decontaminated between each sample. The concrete samples were collected, placed in pre-cleaned sample jars, labeled, and submitted to CT&E for PCB analysis.

According to the analytical results, the concrete cores indicated that additional concrete should be removed. Samples C-12636-030300-CK-342 and C-12636-CK-343 directly west of Substation 1A exceeded clean-up criteria. After the removal of another 10-foot by 5-foot section of concrete, three more verification samples were collected and analyzed.

The analytical results of samples C-12636-071100-CK-477, C-12636-071100-CK-478, and C-12636-071100-CK-479 indicated that the concrete cores were below the PCB removal standard of ≤1 mg/kg and met the criteria for this location. This showed that the removal of the concrete and electrical equipment was successfully completed. Information on transportation and disposal is described in Section 15.0.

12.0 TASK 9: SAMPLING OF NATURAL GAS LINES (40 CFR 761 SUBPART M)

Characterization of natural gas pipelines for disposal for salvage or reuses is provided under 40 CFR 761 Subpart M. Before Decommissioning, the natural gas lines were purged and cut in order to terminate the transmission of natural gas. Since the gas lines (pipes) were inactive before abandonment (over 72 hours), wipe samples were collected to indicate if surfaces of these pipes were impacted. A total of four samples were collected based on a total of 4.5 miles of gas piping.

Two wipe samples in the Powerhouse, and two wipe samples in Building 44 were collected and analyzed for PCBs. The standard wipe samples collected consisted of a minimum of 100 cm2 and were collected in accordance with 40 CFR 761.23. These samples were collected from the bottom center of the pipe with equal area on either side of the centerline. The wipe sample analysis was conducted within accordance by Method 3500b/3550B from U.S. EPA's SW-846 Test Methods. The sample locations can be found in Figure 12.0.

13.0 TASK 10: SAMPLING OF MISCELLANEOUS SUSPECT ITEMS

In addition to the entire indicator wipe, confirmation, and verification sampling several other items were sampled for PCBs. These items were included because of the age of the Buildings. Some of the items sampled were felt insulation, electrical packing tape, rinse waters from decontamination, fire protection barriers, and for items that needed to be sampled for waste profiling.

Each waste streams which were generated as part of the Decommissioning Work Plan implementation activities were sampled, if necessary, to determine the waste characterization and appropriate disposal facility. These waste streams included decontamination solvents, wash waters and other decontamination fluids, miscellaneous cleanup debris, solids from pits, equipment used during the implementation such as liners or berming materials, and PPE. All of the analytical results of these additional items are summarized in Table 12.0.

14.0 TASK 11: EQUIPMENT DECONTAMINATION

Decontamination of the equipment used during the implementation of the Work Plan was conducted inside the chemical storage area in Building 63. Decontamination of equipment consisted of high-pressure washing to remove visible debris from the surface of the equipment followed by swabbing with diesel fuel. All wash waters used during the equipment decontamination were collected and transferred to container.

Equipment used to pump PCB containing liquids was decontaminated by recalculating the pumping equipment with diesel fuel with a volume equivalent to at least ten times the volume of the piping. The following equipment was decontaminated as part of the Work Plan implementation:

- Loader No. 315;
- Excavator No. 210;
- Loader No. 205;
- Vacuum Trucks; and
- Miscellaneous hand tools such as shovels and scrapers.

15.0 TASK 12: TEMPORARY STORAGE ,TRANSPORTATION, AND DISPOSAL

Characterization of the various waste streams to determine the appropriate disposal facility was primarily based on data from confirmatory concrete samples. Supporting documentation for the waste characterization, such as waste profiles and disposal facility approvals are provided in Appendix E.

15.1 RECORD KEEPING

According to 40 CFR 761 Subpart J PCB items that are in service that will be disposed in the future, and PCB items that will be disposed must be monitored until the shipping date. CRA fulfilled this by keeping daily logs. The areas where materials were stored prior to shipping were checked daily. Items included in these daily logs were the following:

- Location of where the bulk and PCB waste came from
- Approximation of weight of the PCB waste per stream
- The date the bulk waste was removed (out of service date)
- The dates the bulk waste were temporary stored
- The dates of shipments and disposal
- The serial numbers from equipment
- Unique identification numbers identifying each container
- Fully executed manifests

15.2 TRANSPORTATION AND DISPOSAL

Upon notification, Safety Kleen loaded and transported the drums in accordance with 40 CFR 263 - Standards Applicable to Transporters of Hazardous Waste, 49 CFR – Shippers General Requirements for Shipments and Packaging, 49 CFR 174 - Carriage by Rail, and the applicable sections of 40 CFR 761, for disposal. Prior to transportation, all DOT Approved Vehicles were inspected to ensure that the material securely loaded. The PCB containers used during the removal were be marked according to the requirements of 40 CFR 761.40 as:

CAUTION
CONTAINS
PCBs
(Polychlorinated Biphenyls)
A toxic environmental container requiring special Handling and disposal with U.S. EPA Regulations 40 CFR 761 – For disposal Information Contact the nearest EPA Office In case of an accident or spill, call toll free the U.S. Coast Guard National Response Center: 800-424-8802

Solid materials removed from the Site were loaded onto roll-off boxes and were shipped off Site for disposal at a TSCA permitted landfill or sent for incineration at a TSCA permitted incinerator. The disposal facilities permitted to dispose of the materials removed included the following:

- Safety-Kleen (Aragonite), Inc, Aragonite Utah incinerator (UTD 981 552 177);
- Safety-Kleen (Deer Park), Inc., Deer Park, Texas, incinerator (TXD 055 141 378);
- Grassy Mountain Facility, Knolls, Utah, landfill (UTD 991 301 748); and

Material sent to the two Safety-Kleen incinerators and the Grassy Mountain Facility was sent via roll-off or state truck then loaded on to rail. The rail cars, associated manifest, and shipping information for these facilities are summarized in Table **. Manifests and disposal certifications are provided in Appendix F.

16.0 ADDITIONAL CONSIDERATION

The Administrative Building south of Building 44 was not involved with the removal of PCB light Ballasts. If this building is to remain, it is recommended that at some point in time these ballasts be removed. It was estimated that 140 individual active light fixtures remain in this building.

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17.0 SUMMARY, CONCLUSIONS, AND CERTIFICATION

The following summarizes the activities conducted to comply with the U.S. EPA approved Work Plan:

- removal and disposal at TSCA permitted landfill of over 8,000 individual PCB light ballasts;
- removal and disposal at TSCA permitted landfill of ##### kilograms of impacted PCB concrete, sand, and limestone gravel;
- collection and analysis of one hundred and forty two (142) indicator wipe samples;
- collection and analysis of ### characterization concrete samples to confirm the penetration of the external surfaces;
- collection of ### sand and concrete verification samples underneath and adjacent to impacted concrete to assure complete removal of PCB impacted materials;

Under penalty of law, I certify that, to the best of my knowledge, after appropriate Inquiries of all relevant persons involved in the implementation of the Work Plan and preparation of this Report, the information submitted is accurate and complete, and the activities were conducted in accordance and with the requirements of the U.S. EPA approved PCB Rules Self Implementing Clean-up.

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Sep 30, 2009 08:54

TABLE 1.3

ANALYTICAL SUMMARY OF INDICATOR WIPE SAMPLES
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

Sample ID	*W-061099-12636-KMB-002*	*W-061099-12636-KMB-007*	*W-12636-092399-MM-012*	*W-061099-12636-KMB-011*	*W-12636-092300-MM-021*	*W-12636-092499-SM-041*	*W-12636-092499-MM-046*	*W-12636-092899-MM-051*
Sample Location			*Building 44*		*Building 63 Compactor*	*Powerhouse South Side of Boiler*	*Powerhouse Main Floor Compressors*	*Second Floor Fan Room 1*
Grid Coordinates	*D6*	*C33*	*S23*	*N13*				
Date Sampled	*6/9/1999*	*6/9/1999*	*9/23/1999*	*6/9/1999*	*9/23/1999*	*9/23/1995*	*9/22/1995*	*9/27/1995*
PCBs (mg/kg)								
Aroclor -1016	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1248	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)	**0.14**
Aroclor - 1254	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1260	**8.2**	ND(1.0)	ND (0.10)	ND(1.0)	**0.16**	ND (0.10)	ND (0.10)	**0.54**

Sample ID	*W-061099-12636-KMB-003*	*W-061099-12636-KMB-008*	*W-12636-092399-MM-013*	*W-061099-12636-KMB-012*	*W-12636-092499-MM-023*	*W-12636-092399-MM-042*	*W-12636-092499-MM-047*	*W-12636-092899-MM-052*
Sample Location			*Building 44*		*Second Floor Penthouse Elevator*	*Powerhouse South Side of Boiler*	*Powerhouse Main Floor Compressors*	*Second Floor Fan Room 2*
Grid Coordinates	*E5*	*D33*	*S23*	*N5*				
Date Sampled	*6/9/1999*	*6/9/1999*	*9/23/1999*	*6/9/1999*	*9/24/1999*	*9/23/1999*	*9/22/1999*	*9/27/1999*
PCBs (mg/kg)								
Aroclor -1016	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1248	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	**0.29**	ND (0.10)	**0.2**	**0.14**
Aroclor - 1254	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1260	ND(1.0)	8.1	ND (0.10)	ND(1.0)	**0.19**	ND (0.10)	**0.23**	**0.26**

Sample ID	*W-061099-12636-KMB-004*	*W-061099-12636-KMB-009*	*W-12636-092399-MM-014*	*W-12636-092300-MM-018*	*W-12636-092499-MM-038*	*W-12636-092399-MM-043*	*W-12636-092499-MM-048*	*W-12636-092899-MM-053*
Sample Location			*Building 44*	*Building 63 Compactor*	*Powerhouse*	*Powerhouse South Side of Boiler*	*Powerhouse Main Floor Compressors*	*Second Floor Fan Room 3*
Grid Coordinates	*E13*	*N32*	*S23*					
Date Sampled	*6/9/1999*	*6/9/1999*	*9/23/1999*	*9/23/2000*	*9/24/1999*	*9/23/1999*	*9/22/1999*	*9/27/1999*
PCBs (mg/kg)								
Aroclor -1016	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND(1.0)	ND (0.10)	ND (0.10)	ND (2500)
Aroclor - 1221	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND(1.0)	ND (0.10)	ND (0.10)	ND (2500)
Aroclor - 1232	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND(1.0)	ND (0.10)	ND (0.10)	ND (2500)
Aroclor - 1242	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND(1.0)	ND (0.10)	ND (0.10)	ND (2500)
Aroclor - 1248	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND(1.0)	ND (0.10)	**0.65**	ND (2500)
Aroclor - 1254	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND(1.0)	ND (0.10)	ND (0.10)	**79**
Aroclor - 1260	ND(1.0)	ND(1.0)	ND (0.10)	ND(1.0)	ND(1.0)	ND (0.10)	**0.66**	**30**

Sample ID	*W-061099-1236-KMB-005*	*W-12636-092399-MM-010*	*W-12636-092399-MM-015*	*W-12636-092300-MM-019*	*W-12636-092499-MM-039*	*W-12636-092499-MM-044*	*W-12636-092499-MM-049*	*W-12636-092899-MM-054*
Sample Location	*Substation No. 3 Transformer Pad*	*Building 44*	*Building 44*	*Building 63 Compactor*	*Powerhouse*	*Powerhouse Main Floor Compressors*	*Powerhouse Main Floor Compressors*	*Second Floor Fan Room 4*
Grid Coordinates	*D14*	*S23*	*S23*					
Date Sampled	*6/9/1999*	*9/23/1999*	*9/23/1999*	*9/23/1999*	*9/24/1999*	*9/24/1999*	*9/22/1999*	*9/27/1999*
PCBs (mg/100 cm ^{2})								
Aroclor -1016	ND(33)	ND (0.10)	ND (0.10)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND(33)	ND (0.10)	ND (0.10)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND(33)	ND (0.10)	ND (0.10)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND(33)	ND (0.10)	ND (0.10)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1248	ND(33)	ND (0.10)	ND (0.10)	ND (0.10)	ND(1.0)	**0.11**	ND (0.10)	ND (0.10)
Aroclor - 1254	ND(33)	ND (0.10)	ND (0.10)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	**0.77**
Aroclor - 1260	**2.8**	ND (0.10)	ND (0.10)	ND (0.10)	ND(1.0)	**0.16**	ND (0.10)	**0.3**

Sample ID	*W-061099-12636-KMB-006*	*W-12636-092399-MM-011*	*W-061099-12636-KMB-010*	*W-12636-092300-MM-020*	*W-12636-092499-MM-040*	*W-12636-092499-MM-045*	*W-12636-092499-MM-050*	*W-12636-092899-MM-055A*
Sample Location		*Building 44*		*Building 63 Compactor*	*Powerhouse*	*Powerhouse Main Floor Compressors*	*Powerhouse Main Floor Compressors*	*Second Floor Fan Room 5*
Grid Coordinates	*E26*	*S23*	*N25*					
Date Sampled	*6/9/1999*	*9/23/1999*	*6/9/1995*	*9/23/1999*	*9/24/1999*	*9/24/1999*	*9/22/1999*	*9/27/1999*
PCBs (ug/100 cm ^{2})								
Aroclor -1016	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND(1.0)	ND (0.10)	ND(67)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1248	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	**0.12**
Aroclor - 1254	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	ND (0.10)	**0.92**
Aroclor - 1260	ND(1.0)	ND (0.10)	ND(1.0)	ND (0.10)	**0.16**	**0.22**	**0.35**	**0.66**

TABLE 1.3

ANALYTICAL SUMMARY OF INDICATOR WIPE SAMPLES
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

Sample ID	*W-12636-092899-MM-055C*	*W-12636-092899-MM-055B*	*W-12636-092899-MM-060A*	*W-12636-092899-MM-062B*	*W-12636-092899-MM-065A*	*W-12636-092999-SM-068*	*W-12636-092999-MM-073*	*W-12636-101899-MM-155*
Sample Location	*Second Floor*	*Second Floor*	*Second Floor*	*Second Floor*	*Second Floor*	*Basement Fan Room*	*Building 44*	*Building 44*
	Fan Room 5	*Fan Room 5*	*Fan Room 10*	*Fan Room 12*	*Fan Room 15*	*North Capacitor B28*	*North Truck Dock*	*Underneath Interior Transformer*
Grid Coordinates								
Date Sampled	*9/27/1999*	*9/27/1995*	*9/27/1995*	*9/27/1995*	*9/27/1995*	*9/28/1995*	*9/29/1999*	*10/18/1999*
PCBs (mg/kg)								
Aroclor -1016	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1248	ND (0.10)	**0.13**	**0.12**	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1254	ND (0.10)	ND (0.10)	**0.4**	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1260	ND (0.10)	**0.5**	**0.37**	**0.16**	**0.16**	ND (0.10)	**0.14**	ND (0.10)

Sample ID	*W-12636-092899-MM-056A*	*W-12636-092899-MM-058A*	*W-12636-092899-MM-060B*	*W-12636-092899-MM-063A*	*W-12636-092899-MM-065B*	*W-12636-092999-SM-069*	*W-12636-092999-MM-095*	*W-12636-101899-MM-156*
Sample Location	*Second Floor*	*Second Floor*	*Second Floor*	*Second Floor*	*Second Floor*	*Basement Fan Room*	*Building 44*	*Building 44*
	Fan Room 6	*Fan Room 8*	*Fan Room 10*	*Fan Room 13*	*Fan Room 15*	*South Capacitor B28*	*Elevator Sump*	*Underneath Interior Transformer*
Grid Coordinates								
Date Sampled	*9/27/1999*	*9/27/1999*	*9/27/1999*	*9/27/1999*	*9/27/1999*	*9/28/1999*	*9/29/1999*	*10/18/1999*
PCBs (mg/kg)								
Aroclor -1016	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (10)	ND (0.10)	ND (0.10)
Aroclor - 1248	**0.15**	ND (0.10)	**0.11**	ND (0.10)	ND (0.10)	ND (10)	ND (0.10)	**0.14**
Aroclor - 1254	**0.36**	**0.18**	**0.31**	ND (0.10)	ND (0.10)	**3.8**	ND (0.10)	ND (0.10)
Aroclor - 1260	**0.24**	**0.12**	**0.24**	**0.21**	**0.2**	**1.1**	ND (0.10)	**0.52**

Sample ID	*W-12636-092899-MM-056B*	*W-12636-092899-MM-058B*	*W-12636-092899-MM-061A*	*W-12636-092899-MM-063B*	*W-12636-092899-MM-066A*	*W-12636-092999-MM-070*	*W-12636-101599-MM-152*	*W-12636-112499-MM-167*
Sample Location	*Second Floor*	*Second Floor*	*Second Floor*	*Second Floor*	*Second Floor*	*Building 44*	*Building 44*	*Substation No. 6*
	Fan Room 6	*Fan Room 8*	*Fan Room 11*	*Fan Room 13*	*Fan Room 16*	*North Truck Dock*	*Cargo Elevator Room*	*Capacitor Bank on Floor*
Grid Coordinates								
Date Sampled	*9/27/1999*	*9/27/1999*	*9/27/1999*	*9/27/1999*	*9/27/1999*	*9/29/1999*	*10/15/1999*	*11/23/1999*
PCBs (mg/kg)								
Aroclor -1016	ND (0.10)	ND (0.10)	ND (0.10)	ND (50)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND (0.10)	ND (0.10)	ND (0.10)	ND (50)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND (0.10)	ND (0.10)	ND (0.10)	ND (50)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND (0.10)	ND (0.10)	ND (0.10)	ND (50)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1248	ND (0.10)	ND (0.10)	**0.12**	ND (50)	ND (0.10)	ND (0.10)	ND (0.10)	**0.28**
Aroclor - 1254	**0.76**	**0.14**	ND (0.10)	**2.4**	**0.12**	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1260	**0.4**	**0.21**	**0.3**	**1**	**0.15**	ND (0.10)	**0.27**	**0.21**

Sample ID	*W-12636-092899-MM-057A*	*W-12636-092899-MM-059A*	*W-12636-092899-MM-061B*	*W-12636-092899-MM-064A*	*W-12636-092899-MM-066B*	*W-12636-092999-MM-071*	*W-12636-101599-MM-153*	*W-12636-112499-MM-168*
Sample Location	*Second Floor*	*Second Floor*	*Second Floor*	*Second Floor*	*Second Floor*	*Building 44*	*Building 44*	*Substation No. 6*
	Fan Room 7	*Fan Room 9*	*Fan Room 12*	*Fan Room 14*	*Fan Room 16*	*North Truck Dock*	*Cargo Elevator Room*	*Capacitor Bank on Floor*
Grid Coordinates								
Date Sampled	*9/27/1999*	*9/27/1999*	*9/27/1999*	*9/27/1999*	*9/27/1999*	*9/29/1999*	*10/15/1999*	*11/23/1995*
PCBs (mg/100 cm ^{2})								
Aroclor -1016	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1248	**0.12**	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	**0.37**
Aroclor - 1254	**0.28**	**0.12**	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1260	**0.41**	**0.11**	**0.21**	**0.45**	**0.14**	ND (0.10)	**0.77**	**0.39**

Sample ID	*W-12636-092899-MM-057B*	*W-12636-092899-MM-059B*	*W-12636-092899-MM-062A*	*W-12636-092899-MM-064B*	*W-12636-092899-MM-067*	*W-12636-092999-MM-072*	*W-12636-101899-MM-154*	*W-12636-113099-MM-185*
Sample Location	*Second Floor*	*Second Floor*	*Second Floor*	*Second Floor*	*Second Floor*	*Building 44*	*Building 44*	*Bay P16*
	Fan Room 7	*Fan Room 9*	*Fan Room 12*	*Fan Room 14*	*Fan Room Kitchen*	*North Truck Dock*	*Powerhouse Sump*	
Grid Coordinates								
Date Sampled	*9/27/1995*	*9/27/1999*	*9/27/1999*	*9/27/1999*	*9/27/1999*	*9/29/1999*	*10/18/1999*	*11/30/1999*
PCBs (ng/100 cm ^{2})								
Aroclor -1016	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1248	ND (0.10)	**0.11**	ND (0.10)	ND (0.10)	**0.11**	ND (0.10)	ND (0.10)	**6.7**
Aroclor - 1254	**0.22**	**0.14**	ND (0.10)	ND (0.10)	**0.24**	**0.22**	ND (0.10)	**2.2**
Aroclor - 1260	ND (0.10)	**0.33**	**0.15**	**0.5**	**0.15**	**0.18**	ND (0.10)	**0.54**

TABLE 1.3

ANALYTICAL SUMMARY OF INDICATOR WIPE SAMPLES
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

Sample ID	*W-12636-112499-MM-169*	*W-12636-031900-BS-250*	*W-12636-031900-BS-255*	*W-12636-031900-BS-260*	*W-12636-031900-BS-265*	*W-12636-031900-BS-270*	*W-12636-032100-BS-275*	*W-12636-032100-BS-280*
Sample Location	*Substation No. 5 Capacitor Bank*	*Substation 2 Transformer Pad*	*Substation 2 Transformer Pad*	*Substation 3 Transformer Pad*	*Substation 4 Transformer Pad*	*Substation 1/1a Transformer Pad*	*Substation 6 Transformer Pad*	*Substation 7 Transformer Pad*
Grid Coordinates	*on Floor*							
Date Sampled	*11/23/1999*	*3/19/2000*	*3/19/2000*	*3/19/2000*	*3/19/2000*	*3/19/2000*	*3/21/2000*	*3/21/2000*
PCBs (mg/kg)								
Aroclor -1016	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (10)	ND (0.1)	ND (0.1)
Aroclor - 1221	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (10)	ND (0.1)	ND (0.1)
Aroclor - 1232	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (10)	ND (0.1)	ND (0.1)
Aroclor - 1242	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (10)	ND (0.1)	ND (0.1)
Aroclor - 1248	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (10)	ND (0.1)	ND (0.1)
Aroclor - 1254	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (10)	ND (0.1)	ND (0.1)
Aroclor - 1260	**0.3**	**0.28**	ND (0.1)	ND (0.1)	ND (0.1)	**640**	**1.3**	**0.76**

Sample ID	*W-12636-113099-MM-183*	*W-12636-031900-BS-251*	*W-12636-031900-BS-256*	*W-12636-031900-BS-261*	*W-12636-031900-BS-266*	*W-12636-032100-BS-271*	*W-12636-032100-BS-276*	*W-12636-032100-BS-281*
Sample Location	*Bay P16*	*Substation 2 Transformer Pad*	*Substation 3 Transformer Pad*	*Substation 3 Transformer Pad*	*Substation 4 Transformer Pad*	*Substation 5 Transformer Pad*	*Substation 6 Transformer Pad*	*Substation 7 Transformer Pad*
Grid Coordinates								
Date Sampled	*11/30/1999*	*3/19/2000*	*3/19/2000*	*3/19/2000*	*3/19/2000*	*3/21/2000*	*3/21/2000*	*3/21/2000*
PCBs (mg/kg)								
Aroclor -1016	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1221	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1232	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1242	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1248	**8.9**	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1254	**1.8**	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1260	ND (0.10)	ND (0.1)	**0.34**	**0.18**	**0.2**	**0.18**	**0.4**	**2.1**

Sample ID	*W-12636-113099-MM-184*	*W-12636-031900-BS-252*	*W-12636-031900-BS-257*	*W-12636-031900-BS-262*	*W-12636-031900-BS-267*	*W-12636-032100-BS-272*	*W-12636-032100-BS-277*	*W-12636-032100-BS-282*
Sample Location	*Bay P16*	*Substation 2 Transformer Pad*	*Substation 3 Transformer Pad*	*Substation 4 Transformer Pad*	*Substation 4 Transformer Pad*	*Substation 5 Transformer Pad*	*Substation 6 Transformer Pad*	*Substation 7 Transformer Pad*
Grid Coordinates								
Date Sampled	*11/30/1999*	*3/19/2000*	*3/19/2000*	*3/19/2000*	*3/19/2000*	*3/21/2000*	*3/21/2000*	*3/21/2000*
PCBs (mg/kg)								
Aroclor -1016	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1221	ND (0.10)	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1232	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1242	ND (0.10)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1248	**11**	ND (0.1)	ND (0.1)	ND (0.1)	**0.56**	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1254	**2.9**	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1260	**0.87**	**0.13**	**0.41**	**3.1**	**0.28**	ND (0.1)	**0.29**	**4.9**

Sample ID	*W-12636-031900-BS-253*	*W-12636-031900-BS-258*	*W-12636-031900-BS-263*	*W-12636-031900-BS-268*	*W-12636-032100-BS-273*	*W-12636-032100-BS-278*	*W-12636-032100-BS-283*	*W-12636-031900-BS-288*
Sample Location	*Substation 2 Transformer Pad*	*Substation 3 Transformer Pad*	*Substation 4 Transformer Pad*	*Substation 1 Transformer Pad*	*Substation 5 Transformer Pad*	*Substation 6 Transformer Pad*	*Substation 7 Transformer Pad*	*Substation 8 Transformer pad*
Grid Coordinates								
Date Sampled	*3/19/2000*	*3/19/2000*	*3/19/2000*	*3/19/2000*	*3/21/2000*	*3/21/2000*	*3/21/2000*	*3/19/2000*
PCBs (mg/100 cm ^{2})								
Aroclor -1016	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1221	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1232	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1242	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1248	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1254	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1260	**1.1**	**0.13**	**0.85**	**0.82**	ND (0.1)	ND (0.1)	1.4	**0.46**

Sample ID	*W-12636-031900-BS-254*	*W-12636-031900-BS-259*	*W-12636-031900-BS-264*	*W-12636-031900-BS-269*	*W-12636-032100-BS-274*	*W-12636-032100-BS-279*	*W-12636-032100-BS-284*	*W-12636-031900-BS-291*
Sample Location	*Substation 2 Transformer Pad*	*Substation 3 Transformer Pad*	*Substation 4 Transformer Pad*	*Substation 1 Transformer Pad*	*Substation 6 Transformer Pad*	*Substation 6 Transformer Pad*	*Substation 7 Transformer Pad*	*Substation 8 Transformer Pad*
Grid Coordinates								
Date Sampled	*3/19/2000*	*3/19/2000*	*3/19/2000*	*3/19/2000*	*3/21/2000*	*3/21/2000*	*3/21/2000*	*3/19/2000*
PCBs (ug/100 cm ^{2})								
Aroclor -1016	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1221	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1232	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1242	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1248	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1254	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor - 1260	**0.38**	ND (0.1)	**0.11**	**0.93**	ND (0.1)	**0.14**	**0.36**	ND (0.1)

TABLE 1.3

ANALYTICAL SUMMARY OF INDICATOR WIPE SAMPLES
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

Sample ID	*W-12636-032100-BS-285*	*W-12636-031900-BS-292*
Sample Location	*Substation 7 Transformer Pad*	*Substation 5 Transformer Pad*
Grid Coordinates		
Date Sampled	*3/21/2000*	*3/19/2000*
PCBs (mg/kg)		
Aroclor -1016	ND (0.1)	ND (0.1)
Aroclor - 1221	ND (0.1)	ND (0.1)
Aroclor - 1232	ND (0.1)	ND (0.1)
Aroclor - 1242	ND (0.1)	ND (0.1)
Aroclor - 1248	ND (0.1)	ND (0.1)
Aroclor - 1254	ND (0.1)	ND (0.1)
Aroclor - 1260	**0.24**	ND (0.1)

Sample ID	*W-12636-031900-BS-286*	*W-12636-031900-BS-293*
Sample Location	*Substation 8 Transformer Pad*	*Substation 5 Transformer Pad*
Grid Coordinates		
Date Sampled	*3/19/2000*	*3/19/2000*
PCBs (mg/kg)		
Aroclor -1016	ND (0.1)	ND (0.1)
Aroclor - 1221	ND (0.1)	ND (0.1)
Aroclor - 1232	ND (0.1)	ND (0.1)
Aroclor - 1242	ND (0.1)	ND (0.1)
Aroclor - 1248	ND (0.1)	ND (0.1)
Aroclor - 1254	ND (0.1)	ND (0.1)
Aroclor - 1260	**0.49**	ND (0.1)

Sample ID	*W-12636-031900-BS-287*	*W-12636-031900-BS-289*
Sample Location	*Substation 8 Transformer Pad*	*Substation 8 Transformer Pad*
Grid Coordinates		
Date Sampled	*3/19/2000*	*3/19/2000*
PCBs (mg/kg)		
Aroclor -1016	ND (0.1)	ND (0.1)
Aroclor - 1221	ND (0.1)	ND (0.1)
Aroclor - 1232	ND (0.1)	ND (0.1)
Aroclor - 1242	ND (0.1)	ND (0.1)
Aroclor - 1248	ND (0.1)	ND (0.1)
Aroclor - 1254	ND (0.1)	ND (0.1)
Aroclor - 1260	**0.29**	ND (0.1)

Sample ID	*W-12636-031900-BS-290*
Sample Location	*Substation 8 Transformer Pad*
Grid Coordinates	
Date Sampled	*3/19/2000*
PCBs (mg/100 cm ^{2})	
Aroclor -1016	ND (0.1)
Aroclor - 1221	ND (0.1)
Aroclor - 1232	ND (0.1)
Aroclor - 1242	ND (0.1)
Aroclor - 1248	ND (0.1)
Aroclor - 1254	ND (0.1)
Aroclor - 1260	**0.41**

Sample ID	*W-12636-031900-BS-294*
Sample Location	*Substation 5 Transformer Pad*
Grid Coordinates	
Date Sampled	*3/19/2000*
PCBs (ug/100 cm ^{2})	
Aroclor -1016	ND (0.1)
Aroclor - 1221	ND (0.1)
Aroclor - 1232	ND (0.1)
Aroclor - 1242	ND (0.1)
Aroclor - 1248	ND (0.1)
Aroclor - 1254	ND (0.1)
Aroclor - 1260	

TABLE 4.1

INVENTORY SUMMARY OF TRANSFORMERS
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

Unit	*Substation*	*Serial Number*	*Location*	*Gallons*	*Total Weight*
1	4	6179018	Roof Outside	342	8,910 lbs
2	4	C-184095	Roof Outside	420	10,200 lbs
3	4	6179014	Roof Outside	342	8,910 lbs
4	4	6178998	Roof Outside	342	8,910 lbs
5	2	6179021	Roof Outside	342	8,910 lbs
6	2	6179017	Roof Outside	342	8,910 lbs
7	2	6179004	Roof Outside	342	8,910 lbs
8	2	6178997	Roof Outside	342	8,910 lbs
9	1A	5937	Roof Outside	450	15,100 lbs
10	1	6179019	Roof Outside	342	8,910 lbs
11	1	6179024	Roof Outside	342	8,910 lbs
12	1	6178996	Roof Outside	342	8,910 lbs
13	1	6179012	Roof Outside	342	8,910 lbs
14	3	6179008	Roof Outside	342	8,910 lbs
15	3	6179023	Main Switchyard	342	8,910 lbs
16	3	6179016	Main Switchyard	342	8,910 lbs
17	3	6179020	Main Switchyard	342	8,910 lbs
18	Main (Stepdown Regulators)	B502119	Main Switchyard	1,065	22,600 lbs
19	Main (Stepdown Regulators)	B502117	Main Switchyard	1,065	22,600 lbs
20	Main (Stepdown Regulators)	B502118	Main Switchyard	1,065	22,600 lbs
21	Main (Stepdown Regulators)	C255946	Main Switchyard	1,065	22,600 lbs
22	Main	C184333	Main Switchyard	2,575	63,200 lbs
23	Main	B502116	Main Switchyard	2,575	63,200 lbs
24	Main	B502115	Main Switchyard	2,575	63,200 lbs
25	Main	B502114	Main Switchyard	2,575	63,200 lbs
26	6	6179010	Roof Outside	342	8,910 lbs
27	6	6179005	Roof Outside	342	8,910 lbs
28	6	6179003	Roof Outside	342	8,910 lbs
29	6	6178999	Roof Outside	342	8,910 lbs
30	8	6179007	Roof Outside	342	8,910 lbs
31	8	6178995	Roof Outside	342	8,910 lbs
32	8	6179009	Roof Outside	342	8,910 lbs
33	8	6179001	Roof Outside	342	8,910 lbs
34	7	6179013	Roof Outside	342	8,910 lbs
35	7	6179000	Roof Outside	342	8,910 lbs
36	7	6179025	Roof Outside	342	8,910 lbs
37	7	6179002	Roof Outside	342	8,910 lbs
38	5	6179006	Roof Outside	342	8,910 lbs
39	5	6179011	Roof Outside	342	8,910 lbs
40	5	6179015	Roof Outside	342	8,910 lbs
41	5	6179022	Roof Outside	342	8,910 lbs
42	9	C-175295	Inside Platform	425	14,500 lbs
43	10	C-173197	Inside Platform	342	17,100 lbs
44	10	C-173196	Inside Platform	342	17,100 lbs
45	14	*********	Inside Platform	342	17,100 lbs
46	14	*********	Inside Platform	342	17,100 lbs

Total Gallons	***Total Weight***
27,825 galllons	727610 lbs
27,825 galllons disposed	316,010 lbs disposed
	411,600 lbs recycled

TABLE 4.1

INVENTORY SUMMARY OF TRANSFORMERS
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

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TABLE 4.2

INVENTORY SUMMARY OF CAPACITORS
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

Quantity	*Location*
1	E-3 Fan Room 1
1	K-3 Fan Room 2
1	E-8 Fan Room 3
1	K-8 Fan Room 4
3	E-12 Fan Room 5
2	K-12 Fan Room 6
2	E-17 Fan Room 7
2	K-17 Fan Room 8
2	E-21 Fan Room 9
3	K-22 Fan Room 10
2	E-26 Fan Room 11
2	K-26 Fan Room 12
2	E-30 Fan Room 13
2	K-30 Fan Room 14
2	E-35 Fan Room 15
2	K-35 Fan Room 16
6	B-27 Basement Fan Room
2	K-1 Ad Bldg Fan Room
11	Basement Power House
72	E-23 Substation 5
72	K-23 Substation 6
60	E-32 Substation 7
60	K-32 Substation 8
1	E-34UP Air Unit
1	H-35UP Air Unit
1	G-33UP Air Unit
1	J-35UP Air Unit
1	J-33UP Air Unit
1	H-37DWN Air Unit
Total Capacitors 319	

TABLE 4.3

SUMMARY OF SWITCHGEAR ELECTRICAL ITEMS
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

	Potential Transformers	Oil Blast Breakers	Potheads (Switches)
Building 44			
Substation 1			
Substation 2			
Substation 3			
Substation 4			
Substation 5			
Substation 6			
Substation 7			
Substation 8			
Sub Total:			
Main Swithyard (Primary Substation			
Outside			
Inside			
Sub Total:			
Powerhouse			
Basement			
Switch Room			
Sub Total:			
TOTAL:			

TABLE 4.3

SUMMARY OF SWITCHGEAR ELECTRICAL ITEMS
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

X,Y, Z End Terminators

TABLE 4.4

ANALYTICAL SUMMARY OF CHARACTERIZATION SAMPLING FROM TRANSFORMER PADS
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

Sample ID	*C-12636-061200-NEM-318*	*C-12636-061200-NEM-317*	*C-12636-061200-NEM-322*	*C-12636-061200-NEM-327*	*C-12636-061200-NEM-332*	*C-12636-061200-NEM-337*	*C-12636-061200-NEM-342*	*C-12636-061200-NEM-347*	*C-12636-061200-NEM-352*
Sample Location	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1A*	*Substation 3*	*Substation 3*
Grid Coordinates									
Date Sampled	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*
PCBs (mg/kg)									
Aroclor -1016	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1248	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1254	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1260	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

Sample ID	*C-12636-061200-NEM-315*	*C-12636-061200-NEM-323*	*C-12636-061200-NEM-328*	*C-12636-061200-NEM-333*	*C-12636-061200-NEM-338*	*C-12636-061200-NEM-343*	*C-12636-061200-NEM-348*	*C-12636-061200-NEM-353*	*C-12636-061200-NEM-358*
Sample Location	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1A*	*Substation 3*	*Substation 3*	*Substation 3*
Grid Coordinates									
Date Sampled	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*
PCBs (mg/kg)									
Aroclor -1016	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1248	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1254	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1260	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

Sample ID	*C-12636-061200-NEM-316*	*C-12636-061200-NEM-319*	*C-12636-061200-NEM-324*	*C-12636-061200-NEM-329*	*C-12636-061200-NEM-334*	*C-12636-061200-NEM-339*	*C-12636-061200-NEM-344*	*C-12636-061200-NEM-349*	*C-12636-061200-NEM-354*
Sample Location	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1A*	*Substation 3*	*Substation 3*
Grid Coordinates									
Date Sampled	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*
PCBs (mg/kg)									
Aroclor -1016	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1248	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1254	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1260	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

Sample ID	*C-12636-061200-NEM-320*	*C-12636-061200-NEM-325*	*C-12636-061200-NEM-330*	*C-12636-061200-NEM-335*	*C-12636-061200-NEM-340*	*C-12636-061200-NEM-345*	*C-12636-061200-NEM-350*	*C-12636-061200-NEM-355*	*C-12636-061200-NEM-360*
Sample Location	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1A*	*Substation 3*	*Substation 3*	*Substation 3*
Grid Coordinates									
Date Sampled	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*
PCBs (ug/100 cm ^{2})									
Aroclor -1016	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1248	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1254	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1260	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

Sample ID	*C-12636-061200-NEM-321*	*C-12636-061200-NEM-326*	*C-12636-061200-NEM-331*	*C-12636-061200-NEM-336*	*C-12636-061200-NEM-341*	*C-12636-061200-NEM-346*	*C-12636-061200-NEM-351*	*C-12636-061200-NEM-356*	*C-12636-061200-NEM-361*
Sample Location	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 1*	*Substation 3*	*Substation 3*	*Substation 3*	*Substation 3*
Grid Coordinates									
Date Sampled	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*
PCBs (ug/100 cm ^{2})									
Aroclor -1016	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1221	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1232	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1242	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1248	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1254	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Aroclor - 1260	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

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TABLE 4.4

ANALYTICAL SUMMARY OF CHARACTERIZATION SAMPLING FROM TRANSFORMER PADS
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

C-12636-061200-NEM-357	*C-12636-061200-NEM-362*	*C-12636-061200-NEM-367*	*C-12636-061200-NEM-372*	*C-12636-061200-NEM-377*	*C-12636-061200-NEM-382*	*C-12636-061200-NEM-387*	*C-12636-061200-NEM-392*	*C-12636-061200-NEM-397*	*C-12636-061200-NEM-402*	*C-12636-061200-NEM-407*
Substation 3	*Substation 3*	*Substation 3*	*Substation 3*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 2*	*Substation 2*
6/12/2000	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

C-12636-061200-NEM-363	*C-12636-061200-NEM-368*	*C-12636-061200-NEM-373*	*C-12636-061200-NEM-378*	*C-12636-061200-NEM-383*	*C-12636-061200-NEM-388*	*C-12636-061200-NEM-393*	*C-12636-061200-NEM-398*	*C-12636-061200-NEM-403*	*C-12636-061200-NEM-408*	*C-12636-061200-NEM-413*
Substation 3	*Substation 3*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 7*		*Substation 2*	*Substation 2*
6/12/2000	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

C-12636-061200-NEM-359	*C-12636-061200-NEM-364*	*C-12636-061200-NEM-369*	*C-12636-061200-NEM-374*	*C-12636-061200-NEM-379*	*C-12636-061200-NEM-384*	*C-12636-061200-NEM-389*	*C-12636-061200-NEM-394*	*C-12636-061200-NEM-399*	*C-12636-061200-NEM-404*	*C-12636-061200-NEM-409*
Substation 3	*Substation 3*	*Substation 3*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 2*	*Substation 2*
6/12/2000	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

C-12636-061200-NEM-365	*C-12636-061200-NEM-370*	*C-12636-061200-NEM-375*	*C-12636-061200-NEM-380*	*C-12636-061200-NEM-385*	*C-12636-061200-NEM-390*	*C-12636-061200-NEM-395*	*C-12636-061200-NEM-400*	*C-12636-061200-NEM-405*	*C-12636-061200-NEM-410*	*C-12636-061200-NEM-415*
Substation 3	*Substation 3*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 2*	*Substation 2*	*Substation 2*	*Substation 2*
6/12/2000	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

C-12636-061200-NEM-366	*C-12636-061200-NEM-371*	*C-12636-061200-NEM-376*	*C-12636-061200-NEM-381*	*C-12636-061200-NEM-386*	*C-12636-061200-NEM-391*	*C-12636-061200-NEM-396*	*C-12636-061200-NEM-401*	*C-12636-061200-NEM-406*	*C-12636-061200-NEM-411*	*C-12636-061200-NEM-416*
Substation 3	*Substation 3*	*Substation 3*	*Substation 3*	*Substation 7*	*Substation 7*	*Substation 7*	*Substation 2*	*Substation 2*	*Substation 2*	*Substation 2*
6/12/2000	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

TABLE 4.4

ANALYTICAL SUMMARY OF CHARACTERIZATION SAMPLING FROM TRANSFORMER PADS
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

C-12636-061200-NEM-412	*C-12636-061200-NEM-417*	*C-12636-061200-NEM-422*	*C-12636-061200-NEM-427*	*C-12636-061200-NEM-432*	*C-12636-061200-NEM-437*	*C-12636-061200-NEM-442*	*C-12636-061200-NEM-447*	*C-12636-061200-NEM-452*	*C-12636-071700-CK-479*	*C-12636-072500-CK-484*
Substation 2	*Substation 2*	*Substation 2*	*Substation 6*	*Substation 6*	*Substation 6*	*Substation 6*	*Substation 6*			
6/12/2000	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*7/17/2000*	*7/25/2000*
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

C-12636-061200-NEM-418	*C-12636-061200-NEM-423*	*C-12636-061200-NEM-428*	*C-12636-061200-NEM-433*	*C-12636-061200-NEM-438*	*C-12636-061200-NEM-443*	*C-12636-061200-NEM-448*	*C-12636-061200-NEM-453*	*C-12636-071700-CK-480*	*C-12636-072500-CK-485*	*C-12636-072500-CK-490*
Substation 2	*Substation 2*		*Substation 6*	*Substation 6*	*Substation 6*	*Substation 6*	*Substation 6*			
6/12/2000	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*7/17/2000*	*7/25/2000*	*7/25/2000*
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

C-12636-061200-NEM-414	*C-12636-061200-NEM-419*	*C-12636-061200-NEM-424*	*C-12636-061200-NEM-429*	*C-12636-061200-NEM-434*	*C-12636-061200-NEM-439*	*C-12636-061200-NEM-444*	*C-12636-061200-NEM-449*	*C-12636-061200-NEM-313c*	*C-12636-071700-CK-481*	*C-12636-072500-CK-486*
Substation 2	*Substation 2*	*Substation 2*	*Substation 6*	*Substation 6*	*Substation 6*	*Substation 6*	*Substation 6*			
6/12/2000	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*7/17/2000*	*7/25/2000*
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

C-12636-061200-NEM-420	*C-12636-061200-NEM-425*	*C-12636-061200-NEM-430*	*C-12636-061200-NEM-435*	*C-12636-061200-NEM-440*	*C-12636-061200-NEM-445*	*C-12636-061200-NEM-450*	*C-12636-061200-NEM-314c*	*C-12636-071700-CK-482*	*C-12636-072500-CK-487*
Substation 2	*Substation 2*	*Substation 6*	*Substation 6*	*Substation 6*	*Substation 6*	*Substation 6*			
6/12/2000	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*7/17/2000*	*7/25/2000*
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

C-12636-061200-NEM-421	*C-12636-061200-NEM-426*	*C-12636-061200-NEM-431*	*C-12636-061200-NEM-436*	*C-12636-061200-NEM-441*	*C-12636-061200-NEM-446*	*C-12636-061200-NEM-451*	*C-12636-071700-CK-478*	*C-12636-072500-CK-483*	*C-12636-072500-CK-488*
Substation 2	*Substation 2*	*Substation 6*	*Substation 6*	*Substation 6*	*Substation 6*	*Substation 6*			
6/12/2000	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*6/12/2000*	*7/17/2000*	*7/25/2000*	*7/25/2000*
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)

TABLE 4-1

ANALYTICAL SUMMARY OF CHARACTERIZATION SAMPLING FROM TRANSFORMER PADS
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

C-12636-072500-CK-489	
7/25/2000	
ND (0.10)	
ND (0.10)	
ND (0.10)	
ND (0.10)	
ND (0.10)	
ND (0.10)	
ND (0.10)	
C-12636-072500-CK-491	
7/25/2000	
ND (0.10)	
ND (0.10)	
ND (0.10)	
ND (0.10)	
ND (0.10)	
ND (0.10)	
ND (0.10)	
C-12636-080800-CK-507	
8/9/2000	
ND (0.10)	
ND (0.10)	
ND (0.10)	
ND (0.10)	
ND (0.10)	
ND (0.10)	
ND (0.10)	

TABLE 5.0

ANALYTICAL SUMMARY OF INIDCATOR WIPE, CHARACTERIZATION, AND VERIFICATION SAMPLING IN THE BASEMENT FAN ROOM
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

Sample ID	*W-12636-092999-SM-068*	*W-12636-092999-SM-069*	*C-12636-121799-MM-214*	*C-12636-121799-MM-215*	*C-12636-121799-MM-216*	*C-12636-121799-MM-217*
Sample Location	*Basement Fan Room*	*Basement Fan Room*	*Basement Fan Room*	*Basement Fan Room*	*Basement Fan Room*	*Basement Fan Room*
Sample Purpose	*Indicator Wipe*	*Indicator Wipe*	*Characterization Concrete Core*	*Characterization Concrete Cor*	*Confirmation Concrete Core*	*Chararterization Concrete Core*
Date Sampled	*9/29/1999*	*9/29/1999*	*12/17/1999*	*12/17/1999*	*12/17/1999*	*12/17/1999*
PCBs (mg/kg)						
Aroclor -1016	ND(0.10)	ND(0.10)	ND(1.0)	ND(0.2)	ND(0.2)	ND(0.2)
Aroclor - 1221	ND(0.10)	ND(0.10)	ND(1.0)	ND(0.2)	ND(0.2)	ND(0.2)
Aroclor - 1232	ND(0.10)	ND(0.10)	ND(1.0)	ND(0.2)	ND(0.2)	ND(0.2)
Aroclor - 1242	ND(0.10)	ND(0.10)	ND(1.0)	ND(0.2)	ND(0.2)	ND(0.2)
Aroclor - 1248	ND(0.10)	ND(0.10)	ND(1.0)	ND(0.2)	ND(0.2)	ND(0.2)
Aroclor - 1254	ND(0.10)	**3.8**	**29**	ND(0.2)	ND(0.2)	ND(0.2)
Aroclor - 1260	ND(0.10)	**1.1**	**3.3**	ND(0.2)	ND(0.2)	ND(0.2)

Sample ID	*C-12636-121799-MM-218*	*C-12636-121799-MM-219*	*C-12636-030200-CK-240*	*C-12636-030200-CK-241*	*C-12636-030200-CK-242*	*C-12636-030200-CK-243*
Sample Location	*Basement Fan Room*	*Basement Fan Room*	*Basement Fan Room*	*Basement Fan Room*	*Basement Fan Room*	*Basement Fan Room*
Sample Purpose	*Characterization Concrete Core*	*Characterization Concrete Core*	*Characterization Concrete Core*	*Verification Concrete Core*	*Verification Concrete Core*	*Verification Concrete Core*
Date Sampled	*12/17/1999*	*12/17/1999*	*3/2/2000*	*3/2/2000*	*3/2/2000*	*3/2/2000*
PCBs (mg/kg)						
Aroclor -1016	ND(0.20)	ND(0.20)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)
Aroclor - 1221	ND(0.20)	ND(0.20)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)
Aroclor - 1232	ND(0.20)	ND(0.20)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)
Aroclor - 1242	ND(0.20)	ND(0.20)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)
Aroclor - 1248	ND(0.20)	ND(0.20)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)
Aroclor - 1254	ND(0.20)	ND(0.20)	**0.73**	**0.32**	ND(0.67)	**0.076**
Aroclor - 1260	ND(0.20)	ND(0.20)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)

Sample ID	*S-12636-080800-CK-506*	*S-12636-080800-CK-506*	*S-12636-080800-CK-506*
Sample Location	*Basement Fan Room*	*Basement Fan Room*	*Basement Fan Room*
Sample Purpose	*Verification Sand/Beneath Concrete*	*Verification Sand/Beneath Concrete*	*Verification Sand/Beneath Concrete*
Date Sampled	*8/8/2000*	*8/8/2000*	*8/8/2000*
PCBs (mg/kg)			
Aroclor -1016	ND(0.10)	ND(0.10)	ND(0.10)
Aroclor - 1221	ND(0.10)	ND(0.10)	ND(0.10)
Aroclor - 1232	ND(0.10)	ND(0.10)	ND(0.10)
Aroclor - 1242	ND(0.10)	ND(0.10)	ND(0.10)
Aroclor - 1248	ND(0.10)	ND(0.10)	ND(0.10)
Aroclor - 1254	ND(0.10)	ND(0.10)	ND(0.10)
Aroclor - 1260	ND(0.10)	ND(0.10)	ND(0.10)

TABLE 5.0

ANALYTICAL SUMMARY OF INIDCATOR WIPE, CHARACTERIZATION, AND VERIFICATION SAMPLING IN THE BASEMENT FAN ROOM
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

TABLE 7.0

ANALYTICAL SUMMARY OF INDICATOR WIPE, CHARATERIZATION, AND VERIFICATION SAMPLES
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

Sample ID	*W-12636-092899-SM-053*	*C-12636-113099-MM-187*	*C-12636-113099-MM-188*	*C-12636-113099-MM-189*	*C-12636-113099-MM-190*	*C-12636-113099-MM-191*
Sample Location	*Basement Fan Room*	*Fan Room 3*	*Fan Room 3*	*Fan Room 3*	*Fan Room 3*	*Fan Room 3*
Sample Purpose	*Indicator Wipe*	*Characterization Concrete Core*	*Characterization Concrete Core*	*Characterization Concrete Core*	*Characterization Concrete Core*	*Characterization Concrete Core*
Date Sampled	*9/28/1999*	*11/30/1999*	*11/30/1999*	*11/30/1999*	*11/30/1999*	*11/30/1999*
PCBs (mg/kg)						
Aroclor -1016	ND(2.50)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
Aroclor - 1221	ND(2.50)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
Aroclor - 1232	ND(2.50)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
Aroclor - 1242	ND(2.50)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
Aroclor - 1248	ND(2.50)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
Aroclor - 1254	**7.9**	**2.6**	**0.29**	**0.34**	ND(0.20)	**0.5**
Aroclor - 1260	**3**	**0.62**	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)

Sample ID	*C-12636-030200-CK-233*	*C-12636-030200-CK-234*	*C-12636-030200-CK-235*
Sample Location	*Fan Room 3*	*Fan Room 3*	*Fan Room 3*
Sample Purpose	*Verification Concrete Core*	*Verification Concrete Core*	*Verification Concrete Core*
Date Sampled	*3/2/2000*	*3/2/2000*	*3/2/2000*
PCBs (mg/kg)			
Aroclor -1016	ND(0.20)	ND(0.20)	ND(0.67)
Aroclor - 1221	ND(0.20)	ND(0.20)	ND(0.67)
Aroclor - 1232	ND(0.20)	ND(0.20)	ND(0.67)
Aroclor - 1242	ND(0.20)	ND(0.20)	ND(0.67)
Aroclor - 1248	ND(0.20)	ND(0.20)	ND(0.67)
Aroclor - 1254	**0.15**	**0.68**	**0.29**
Aroclor - 1260	ND(0.20)	ND(0.20)	ND(0.67)

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TABLE 8.0

ANALYTICAL SUMMARY OF INDICATOR WIPE, VERIFICATION, AND CHARACTERIZATION SAMPLES FROM FAN ROOM 13
FORMER PEREGRINE FACILITY
GENESEE TOWNSHIP, MICHIGAN

Sample ID	*W-12636-092999-MM-063A*	*W-12636-092999-MM-063B*	*C-12636-113099-MM-193*	*C-12636-113099-MM-194*	*C-12636-113099-MM-195*	*C-12636-113099-MM-196*
Sample Location	*Fan Room 13*	*Fan Room 13*	*Fan Room 13*	*Fan Room 13*	*Fan Room 13*	*Fan Room 13*
Sample Purpose	*Indicator Wipe*	*Indicator Wipe*	*Confirmation Concrete Core*	*Confirmation Concrete Core*	*Confirmation Concrete Core*	*Confirmation Concrete Core*
Date Sampled	*9/29/1999*	*9/29/1999*	*11/30/1999*	*11/30/1999*	*11/30/1999*	*11/30/1999*
PCBs (mg/kg)						
Aroclor -1016	ND(0.10)	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
Aroclor - 1221	ND(0.10)	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
Aroclor - 1232	ND(0.10)	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
Aroclor - 1242	ND(0.10)	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
Aroclor - 1248	ND(0.10)	ND(0.5)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
Aroclor - 1254	ND(0.10)	**2.4**	**0.61**	ND(0.2)	ND(0.2)	ND(0.2)
Aroclor - 1260	**0.21**	**1**	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)

Sample ID	*C-12636-113000-MM-197*	*C-12636-113099-MM-198*	*C-12636-030200-CK-236*	*C-12636-030200-CK-237*	*C-12636-030200-CK-238*	*C-12636-030200-CK-239*
Sample Location	*Fan Room 13*	*Fan Room 13*	*Fan Room 13*	*Fan Room 13*	*Fan Room 13*	*Fan Room 13*
Sample Purpose	*Confirmation Concrete Core*	*Confirmation Concrete Core*	*Verification Concrete Core*	*Verification Concrete Core*	*Verification Concrete Core*	*Verification Concrete Core*
Date Sampled	*11/30/1999*	*11/30/1999*	*3/2/2000*	*3/2/2000*	*3/2/2000*	*3/2/2000*
PCBs (mg/kg)						
Aroclor -1016	ND(0.20)	ND(0.20)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)
Aroclor - 1221	ND(0.20)	ND(0.20)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)
Aroclor - 1232	ND(0.20)	ND(0.20)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)
Aroclor - 1242	ND(0.20)	ND(0.20)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)
Aroclor - 1248	ND(0.20)	ND(0.20)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)
Aroclor - 1254	ND(0.20)	**2.5**	**0.074**	**0.43**	**0.9**	**0.45**
Aroclor - 1260	ND(0.20)	ND(0.20)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)

Sample ID	*WB-12636-101499-SM-135*	*C-12636-061200-NEM-306A*
Sample Location	*Bay P-16*	*Bay P-16*
Sample Purpose	*Wood Block Flooring*	*Confirmation Concrete Core*
Date Sampled	*10/14/1999*	*6/12/2000*
PCBs (mg/kg)		
Aroclor -1016	ND (0.2)	ND(0.10)
Aroclor - 1221	ND (0.2)	ND(0.10)
Aroclor - 1232	ND (0.2)	ND(0.10)
Aroclor - 1242	ND (0.2)	ND(0.10)
Aroclor - 1248	**2.6**	ND(0.10)
Aroclor - 1254	ND (0.2)	ND(0.10)
Aroclor - 1260	ND (0.2)	ND(0.10)

Sample ID	*C-12636-061200-NEM-307C*	*C-12636-061200-NEM-308A*
Sample Location	*Bay P-16*	*Bay P-16*
Sample Purpose	*Confirmation Concrete Core*	*Confirmation Concrete Core*
Date Sampled	*6/12/2000*	*6/12/2000*
PCBs (mg/kg)		
Aroclor -1016	ND(0.10)	ND(0.10)
Aroclor - 1221	ND(0.10)	ND(0.10)
Aroclor - 1232	ND(0.10)	ND(0.10)
Aroclor - 1242	ND(0.10)	ND(0.10)
Aroclor - 1248	ND(0.10)	ND(0.10)
Aroclor - 1254	ND(0.10)	ND(0.10)
Aroclor - 1260	ND(0.10)	ND(0.10)

Sample ID	*C-12636-061200-NEM-309C*	*C-12636-061200-NEM-310A*
Sample Location	*Bay P-16*	*Bay P-16*
Sample Purpose	*Confirmation Concrete Core*	*Confirmation Concrete Core*
Date Sampled	*6/12/2000*	*6/12/2000*
PCBs (mg/kg)		
Aroclor -1016	ND(0.10)	ND(0.10)
Aroclor - 1221	ND(0.10)	ND(0.10)
Aroclor - 1232	ND(0.10)	ND(0.10)
Aroclor - 1242	ND(0.10)	ND(0.10)
Aroclor - 1248	ND(0.10)	ND(0.10)
Aroclor - 1254	ND(0.10)	ND(0.10)
Aroclor - 1260	ND(0.10)	ND(0.10)

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Sample ID	*C-12636-061200-NEM-311C*	*C-12636-061200-NEM-311C*
Sample Location	*Bay P-16*	*Bay P-16*
Sample Purpose	*Confirmation Concrete Core*	*Confirmation Concrete Core*
Date Sampled	*6/12/2000*	*6/12/2000*
PCBs (mg/kg)		
Aroclor -1016		ND(0.10)
Aroclor - 1221		ND(0.10)
Aroclor - 1232		ND(0.10)
Aroclor - 1242		ND(0.10)
Aroclor - 1248		ND(0.10)
Aroclor - 1254		ND(0.10)
Aroclor - 1260		ND(0.10)

Sample ID	*C-12636-061200-NEM-313A*	*C-12636-061200-NEM-313B*
Sample Location	*Bay P-16*	*Bay P-16*
Sample Purpose	*Confirmation Concrete Core*	*Confirmation Concrete Core*
Date Sampled	*6/12/2000*	*6/12/2000*
PCBs (mg/kg)		
Aroclor -1016	ND(0.10)	ND(0.10)
Aroclor - 1221	ND(0.10)	ND(0.10)
Aroclor - 1232	ND(0.10)	ND(0.10)
Aroclor - 1242	ND(0.10)	ND(0.10)
Aroclor - 1248	ND(0.10)	ND(0.10)
Aroclor - 1254	ND(0.10)	ND(0.10)
Aroclor - 1260	ND(0.10)	ND(0.10)

Sample ID	*C-12636-061200-NEM-313A*	*C-12636-061200-NEM-313B*
Sample Location	*Bay P-16*	*Bay P-16*
Sample Purpose	*Confirmation Concrete Core*	*Confirmation Concrete Core*
Date Sampled	*6/12/2000*	*6/12/2000*
PCBs (mg/kg)		
Aroclor -1016		
Aroclor - 1221		
Aroclor - 1232		
Aroclor - 1242		
Aroclor - 1248		
Aroclor - 1254		
Aroclor - 1260		

C-12636-061200-NEM-306B *Bay P-16* *Confirmation Concrete Core* *6/12/2000*	*C-12636-061200-NEM-306C* *Bay P-16* *Confirmation Concrete Core* *6/12/2000*	*C-12636-061200-NEM-307A* *Bay P-16* *Confirmation Concrete Core* *6/12/2000*
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)

C-12636-061200-NEM-308B *Bay P-16* *Confirmation Concrete Core* *6/12/2000*	*C-12636-061200-NEM-308C* *Bay P-16* *Confirmation Concrete Core* *6/12/2000*	*C-12636-061200-NEM-309A* *Bay P-16* *Confirmation Concrete Core* *6/12/2000*
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)

C-12636-061200-NEM-310B *Bay P-16* *Confirmation Concrete Core* *6/12/2000*	*C-12636-061200-NEM-310C* *Bay P-16* *Confirmation Concrete Core* *6/12/2000*	*C-12636-061200-NEM-311A* *Bay P-16* *Confirmation Concrete Core* *6/12/2000*
ND(0.10)	ND(0.10)	
ND(0.10)	ND(0.10)	
ND(0.10)	ND(0.10)	
ND(0.10)	ND(0.10)	
ND(0.10)	ND(0.10)	
ND(0.10)	ND(0.10)	
ND(0.10)	ND(0.10)	

C-12636-061200-NEM-311C *Bay P-16* *Confirmation Concrete Core* *6/12/2000*	*C-12636-061200-NEM-312A* *Bay P-16* *Confirmation Concrete Core* *6/12/2000*	*C-12636-061200-NEM-312B* *Bay P-16* *Confirmation Concrete Core* *6/12/2000*
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)

C-12636-061200-NEM-313C *Bay P-16* *Confirmation Concrete Core* *6/12/2000*	*C-12636-061200-NEM-314A* *Bay P-16* *Confirmation Concrete Core* *6/12/2000*	*C-12636-061200-NEM-314B* *Bay P-16* *Confirmation Concrete Core* *6/12/2000*
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)
ND(0.10)	ND(0.10)	ND(0.10)

C-12636-061200-NEM-313C *Bay P-16* *Confirmation Concrete Core* *6/12/2000*	*C-12636-061200-NEM-314A* *Bay P-16* *Confirmation Concrete Core* *6/12/2000*	*C-12636-061200-NEM-314B* *Bay P-16* *Confirmation Concrete Core* *6/12/2000*

C-12636-061200-NEM-307B
Bay P-16

Confirmation Concrete Core
6/12/2000

ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)

C-12636-061200-NEM-309B
Bay P-16

Confirmation Concrete Core
6/12/2000

ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)

C-12636-061200-NEM-311B
Bay P-16

Confirmation Concrete Core
6/12/2000

C-12636-061200-NEM-312C
Bay P-16

Confirmation Concrete Core
6/12/2000

ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)

C-12636-061200-NEM-314C
Bay P-16

Confirmation Concrete Core
6/12/2000

ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)
ND(0.10)

C-12636-061200-NEM-314C
Bay P-16

Confirmation Concrete Core
6/12/2000