#### Transmitted Via Federal Express

October 1, 2004

James N. Ludlam, P.E. Bureau of Central Remedial Action Division of Hazardous Waste Remediation NYSDEC 625 Broadway, 12<sup>th</sup> Floor Albany, NY 12233-7016

Re: Area 28 Remedial Action Completion Report

Loeffel Site Environs – Operable Unit 3, Site #4-42-006

Nassau, New York

BBL Project #: 100.73.800 #2

Dear Jim:

On behalf of the General Electric Company, this cover letter transmits 2 copies of the *Area 28 Remedial Action Completion Report of the Loeffel Site Environs – Operable Unit 3*, Site #4-42-006 with the March 2003 Second Stipulation and Order of Partial Settlement 89-CV-1135. As required, this report has been certified by J. Paul Doody, P.E., of Blasland, Bouck, & Lee, Inc. We have included an electronic copy of this report on a data compact disk. Please let us know if you have any questions, or need additional copies.

Sincerely,

BLASLAND, BOUCK & LEE, INC.

Mark P. Brown, Ph.D. Senior Vice President

CC/amm Enclosure

cc: Michael Stankiewicz, P.E., NYSDEC

Russ Shaver, NYSDEC

Michael S. Elder, Esq., General Electric Company

Edward K. LaPoint, P.E., General Electric Company (w/enclosure)

J. Paul Doody, P.E., Blasland, Bouck & Lee, Inc. (w/ enclosure) Christopher R. Torell, P.G., Blasland, Bouck, and Lee, Inc. (w/ enclosure) Kimberly D. Elenbaas, Blasland, Bouck & Lee, Inc. (w/ enclosure) Exhibit 2 Second Stipulation and Order of Partial Settlement 89-CV-1135 Site #4-42-006

# Area 28 Remedial Action Completion Report Loeffel Site Environs Operable Unit 3

**Loeffel Site Environs Nassau, New York** 

October 2004

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**Loeffel Site Environs Nassau, New York** 

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## Certification Statement

I certify, to the best of my knowledge, information, and belief, and in general accordance with my professional opinion, that the work described in this Area 28 Remedial Action Completion Report, Loeffel Site Environs, Operable Unit 3, was performed in accordance with the March 26, 2003 Second Stipulation and Order of Partial Settlement 89-CV-1135 Loeffel Site Environs - Site #4-42-006, the May 2003 Request for Proposal, as addended, and approved field changes.



John Paul Doody, P.E. N.Y. License #067405 10-1-2004

Date

## 1. Introduction

#### 1.1 Overview

This *Area 28 Remedial Action Completion Report* (CR) documents the Remedial Action (RA) completed at Area 28 (the Site) of Operable Unit 3 (OU-3) of the Loeffel Site Environs, located in Nassau, New York (Figure 1). Blasland, Bouck & Lee, Inc. (BBL) prepared this CR on behalf of the General Electric Company (GE).

The RA was conducted from August 2003 to July 2004, in accordance with the following documents:

- January 2002 Record of Decision (ROD) for Dewey Loeffel Site OU-3, Towns of Nassau and Schodack, Rensselaer County, Site #4-42-006;
- Area 28 Remedial Action Work Plan (RAWP) (BBL, 2002a);
- March 26, 2003 Second Stipulation and Order of Partial Settlement (SS) 89-CV-1135;
- May 2003 Request for Proposal, Remedial Action Area 28 (RFP), as addended (BBL, 2003a); and
- Field approvals (Appendix A).

The RAWP and the RFP were submitted to the New York State Department of Environmental Conservation (NYSDEC) on July 3, 2002 and May 9, 2003, respectively. The RAWP was approved by the NYSDEC in a letter dated February 20, 2003 (Appendix A), and the RFP was approved prior to implementation of the RA, both verbally and in a letter from the NYSDEC, dated August 13, 2003 (Appendix A).

The primary activities associated with the RA included:

- Site preparation activities (including access road construction, materials staging and dewatering pad [MSDP] construction, and equipment and supplies mobilization);
- Surveying removal area boundaries;
- Temporary water diversion around work areas;
- Removal and disposal of sediments and soils (materials);
- Water treatment and management; and
- Site restoration.

The work area was divided into three removal areas to facilitate the RA: Northern Area, Stream Bed, and Southern Area (NA, SB, and SA, respectively). These removal areas were composed of multiple polygons, defined using a discrete volume/Theissen polygon approach. The Theissen polygons were created using computer software to draw perpendicular bisector lines between adjacent sample locations, thus creating twodimensional, sample-specific polygon areas.

In summary, the RFP described the anticipated removal of a total of approximately 2,173 cubic yards (cy) of materials containing polychlorinated biphenyls (PCBs) from Area 28. It was estimated that, based on 191 predesign PCB samples from 66 locations<sup>1</sup>, approximately 307 cy of Toxic Substances Control Act (TSCA) materials and approximately 1,866 cy of non-TSCA materials would be removed and disposed (Table 1). Based on the conversion 1 cy = 2 ton, as stated in the RFP, the estimated weight to be disposed was approximately 614 tons of TSCA materials and 3,732 tons of non-TSCA materials.

The actual removed volumes of materials removed were 529 cy of TSCA materials and 1,642 cy of non-TSCA materials. These volumes were calculated using as-built survey spot elevations and removal depths, as well as modified TSCA/non-TSCA intervals reported in field notes. The mass of TSCA and non-TSCA materials shipped from the Site, as reported on manifest records, were 1,107 and 2,852 tons (total 3,959 tons), respectively (Table 2). The mass of shipped material included excavated materials from designated areas (e.g., soil, sediment, organic matter, gravel), materials removed from equipment during decontamination, stabilizing agent used to prepare materials for transport, and minor amounts of used supplies (e.g., plastic sheeting, Tyvek® coveralls). Presented below is a summary of the actual removed and shipped material amounts - relative to anticipated material amounts – from each of the three removal areas.

<sup>&</sup>lt;sup>1</sup> Pre-design sampling results are provided in the RFP (BBL, 2003a).

### **Summary of Estimated and Actual Removal Volumes/Weights**

Removal Area	Estimated Volume (cy) <sup>1</sup>		Estimated Weight (ton) <sup>2</sup>		Removed Volume (cy) <sup>3</sup> (calculated from as-built information)		Removed Weight (ton) <sup>4</sup>	
	TSCA	Non- TSCA	TSCA	Non- TSCA	TSCA	Non- TSCA	TSCA	Non- TSCA
NA	307	1,330	614	2,660	529	1,101	<u></u> 5	5 5
SB	0	107	0	214	0	112	<sup>5</sup>	<sup>5</sup>
SA	0	429	0	858	0	429	<sup>5</sup>	5
Rounded Total	307 <sup>6</sup>	1,866 <sup>6</sup>	614	3,732	529	1,642	1,107	2,852
Totals	otals 2,173		4,346		2,171		3,959	

#### Notes:

- 1. "Estimated Volume" is the estimated volume of material to be removed from the Site, as stated in the RFP.
- 2. "Estimated Weight" is the estimated mass of material to be removed based on the conversion value of 1 cy = 2 tons, as stated in the RFP.
- 3. "Removed Volume" is the estimated volume of material removed from the Site, as calculated from the as-built survey spot elevations and removal depths reported in field notes with NYSDEC approved changes.
- 4. "Removed Weight" is the reported mass of material shipped to the disposal facilities. Table 2 -- Summary of Shipped Materials presents volumes of the individual loads of material shipped for off-site disposal, as reported on manifest records.
- 5. -- Due to stabilization and mixing in the MSDP, removal area-specific shipped volume information is not available.
- 6. "Estimated Volume" totals appear slightly different from those in the RFP due to rounding differences during calculations.

The RA was designed and implemented to meet the performance standards and specifications set forth in the RAWP. Key documents developed to support the RA and outline these performance standards and specifications, include:

- Construction Quality Assurance Plan (CQAP) (RAWP Attachment, BBL, 2002b);
- Health and Safety Plan (HASP) (RAWP Attachment, BBL, 2002c); and
- Area 28 Stream and Wetland Restoration/Enhancement Specifications Plan (SWR/ESP) (RAWP Attachment, BBL, 2002d).

Additionally, approvals of subsequent design field modifications that occurred during the implementation of the RA are presented in Appendix A. These modifications included:

- Adjustment of target excavation depth in certain polygons due to equipment refusal;
- Development and implementation of a post-construction sampling protocol; and

• Decision to conduct all support/staging activities of the RA on the eastern bank area of the Valatie Kill.

1.2 Site Description and History

The Site, a compartment of the Valatie Kill, is located in the Loeffel Site Environs OU-3 and extends from near Central Nassau Road, along the Valatie Kill, to the approximate locations of two former impoundment overflow pipes (Figures 1 and 2). PCB-containing materials deposited in Area 28 originated from upstream areas, which

have since been remediated.

The Loeffel Site Environs OU-3 includes Nassau Lake and approximately 2.5 miles of its drainage basin from upstream of the lake to the former Dewey Loeffel Landfill, the former Mead Road Pond Area – adjacent to the former Dewey Loeffel Landfill, and a ravine named Tributary T11A that connects the former Mead Road Pond

Area and the Valatie Kill (Figure 1).

From 1952 until 1980, the landfill was a commercial disposal, storage, and transfer site for industrial materials. During 1983 and 1984, the landfill was remediated by the NYSDEC. Between 1992 and 1998, GE conducted remedial investigation (RI) activities in the Nassau Lake drainage basin, which focused on the potential fate and transport of PCBs that had migrated (via sediments to which PCBs had sorbed) from the landfill. The NYSDEC-

approved RI activities conducted at Area 28 included collection of surface water, substrate, and biota samples.

In addition to the RI activities, 191 pre-design samples were collected between March 26 and April 16 of 2003 to support design of the RA. The objective of the predesign sampling was to assess the extent of PCB-containing materials within Area 28. The pre-design sampling results were reported to the NYSDEC in a letter

from BBL, dated April 28, 2003 (BBL, 2003b).

1.3 Project Roles and Responsibilities

Implementation of the Area 28 RA involved a number of organizations. Each organization had a specific role in completing the RA; these roles are briefly described below.

• **GE** – GE secured the services of the various firms to execute the RA and provided overall direction and

coordination during implementation.

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- NYSDEC The NYSDEC served as the regulatory agency for this project. The NYSDEC provided
  field- and office-based project coordinators to administer NYSDEC responsibilities and to review and
  approve various documentation required by the RA. The NYSDEC also provided construction
  observation as well as review and approval of field design changes.
- **BBL** BBL served as the engineer for the Area 28 RA.
- Blasland, Bouck & Lee Environmental Services, Inc. (BBLES) BBLES provided overall project coordination and construction observation activities.
- SLC Environmental Services, Inc. (SLC) SLC was retained by GE to implement the Area 28 RA construction activities.
- Adirondack Environmental Services, Inc. (Adirondack) Both GE and SLC retained Adirondack for laboratory analytical services.
- Waste Management, Inc. (WM) SLC retained WM disposal facilities for Site-related TSCA materials (sent to Model City disposal facility near Buffalo, New York) and non-TSCA materials (sent to High Acres disposal facility near Rochester, New York).
- Ingraham's Tree & Lawn Service (ITS) ITS was retained by SLC to provide tree clearing and restoration services.
- Terrestrial Environmental Specialists (TES) SLC retained TES for wetland and bank planting.
- Mangiardi Brothers Trucking Company (Mangiardi) Mangiardi was retained by SLC to transport non-TSCA materials.
- **Buffalo Fuel Corporation (BFC)** SCL retained BFC to transport TSCA materials.
- MK Electric (MK) MK was retained by SLC to provide miscellaneous electrical installation services.
- Environmental Land Improvements (ELI) ELI was retained by SLC to provide materials for the construction of the water diversion dam.
- Wendel Duchscherer Surveyors (WDS) WDS was retained by SLC to provide surveying services.
- Troy Sand & Gravel (TSG) SLC retained TSG to supply sand and gravel backfill materials.

#### 1.4 **Format of Document**

This CR summarizes and documents the activities implemented by GE in accordance with the approved RAWP and RFP. The remainder of this report is organized as follows:

- Section 2 Site Preparation and Support Activities;
- Section 3 Remedial Activities;
- Section 4 Stream and Wetland Restoration;
- Section 5 Overall Restoration and Demobilization; and
- Section 6 References.

In addition, this report is supplemented by the following appendices: Project Correspondence (Appendix A); Representative Photographs (Appendix B); Post-Construction Sampling Data (Appendix C); Water Treatment Laboratory Analytical Results (Appendix D); Equipment Wipe Sampling Laboratory Analytical Results (Appendix E); Air Monitoring Field Data (Appendix F); and As-Built Survey Coordinate Data (Appendix G).

# 2. Site Preparation and Support Activities

Several Site preparation activities were performed prior to the commencement of material removal activities. These activities included:

- Placing of Site trailers, security measures, and utilities;
- Clearing;
- Constructing access roads;
- Installing erosion and sedimentation control measures; and
- Preparing the support area including the MSDP, decontamination area, and water treatment area.

Additionally, project support activities were conducted throughout the RA, including:

- Temporary water diversion;
- Air monitoring; and
- Surveying activities.

The Site preparation and support activities are described in greater detail below.

#### 2.1 Site Trailers, Security, and Utilities

Three project trailers (one for SLC, one for NYSDEC, and one for BBL) were placed near the parking lot (shown on Figure 2) during implementation of the RA. Temporary telephone, electrical, and portable sanitary services were also provided at the Site.

To prevent trespassing and enforce access controls, general Site-wide security procedures were implemented, including:

- Identification badges and/or company uniforms for all personnel;
- Locking of trailers/equipment and materials when not in use and as warranted; and
- Mandatory sign-in/out log sheet for all employees and visitors to the Site.

Per GE's policy, a Site-specific security plan was developed to document the procedures implemented to further control access to the Site (*Hazardous Materials Transportation Security Plan* [HMTSP]) (Appendix A). The HMTSP was consistent with GE's HazMat Security Plan Guidelines, and Security and Crisis Management Policy; the plan also met the security plan requirements for the transportation of hazardous materials established by the U.S. Department of Transportation (USDOT), pursuant to 49 CFR Part 172, Subpart I, §172.800 and §172.802.

As part of typical Site operations, a daily inventory of hazardous materials stored on-site and transported off-site was performed by all contractors, consultants, and transportation companies, which themselves were carefully screened, evaluated, and selected by GE employees. According to the provisions of the HMTSP, only authorized employees were permitted access to the Site and to the locations where hazardous materials were stored.

Similarly, only GE-approved transporters were used to ship PCB-containing hazardous wastes. Under GE policy, all GE HazMat employees were required to meet certain security training requirements, including an understanding of/familiarity with the following:

- Overall security objectives;
- Site-specific security procedures and organizational structure;
- Individual security responsibility, including recognizing suspicious activity; and
- Responses to security breaches.

The Site Security and Crisis Management Plan (Attachment C of HMTSP) (GE, 2003), included a schedule for the frequency of inspection; this schedule was followed during implementation of the RA at Area 28.

#### 2.2 Clearing

Two types of clearing were performed at the Site: 1) clearing for Site preparation and access road construction; and 2) above-grade clearing to facilitate equipment access to removal areas. Minimal clearing was performed during construction of the access road along the east side of the Valatie Kill, since a partial access road used by the landowner already existed in this area (See Figures 1 and 2).

ITS conducted the second type of clearing activity, which included clearing and tree removal. ITS cleared materials from along the eastern and western stream banks to allow access to the working areas. Trees greater than 6 inches in diameter at breast-height were removed, as needed. To support restoration activities, a tree inventory was maintained that included photographs of removed trees, along with their locations, species, and sizes. Cleared above-grade materials were either chipped for later use on-site or corded and left on-site for landowner use. In total, 22 trees (eight 7- to 18-inch maples, seven 10- to 17-inch elms, two 8-inch black birches, one 22-inch pine, one 14-inch red maple, one 17-inch poplar, one 9-inch cherry, and one 12-inch ash) were cut down. These trees were replaced during restoration activities (see Section 4<sup>2</sup>).

#### 2.3 **Access Roads**

The existing access road was extended with a layer of geotextile fabric topped by a layer of crusher-run stone, which was then compacted by a vibratory roller. A spur from the access road extended to the west, down and into the eastern stream bank area (Figure 2). The access road constructed/refurbished on the east side of the gravel parking lot began at Krouner Road and extended southward to the northern end of the tennis court (not depicted; approximately 500 feet south of Krouner Road) where it turned to extend westward toward the Valatie Kill to intersect with the access road running parallel to the Valatie Kill. These access roads were approximately 10 to 12 feet wide, allowing for safe travel of excavation and hauling equipment. To gain access to materials on the western side of the Valatie Kill, a temporary access road was built across the Valatie Kill. This road was constructed from riprap stone and crusher-run stone with two 30-inch corrugated high-density polyethylene (HDPE) culverts placed to allow uninterrupted flow in the Valatie Kill.

As needed, additional, small temporary access roads were constructed to allow equipment access for excavation and removal. Geotextile fabric was laid for excavation and hauling equipment to drive over when entering and leaving the work areas to minimize contamination. When necessary, excavation equipment was staged overnight in the work area on geotextile fabric. To provide a secondary level of containment while loading materials, a polyethylene liner was placed each day on the ground beneath the dump truck. Any incidental water or material was contained on the liner, promptly removed, and transported to the MSDP.

<sup>&</sup>lt;sup>2</sup> Two additional trees were surveyed by WDS in the final as-built; see Figures 8 and 9.

#### 2.4 Temporary Erosion and Sedimentation Controls

During clearing, prior to initiation of removal activities, temporary erosion and sedimentation controls were installed to minimize erosion and runoff loading to the Valatie Kill, and to prevent material from being carried beyond the limits of work activities. Only temporary controls are discussed here. Permanent erosion controls are discussed in greater detail in Section 5.

Silt fencing was used to reduce stormwater runoff velocity and runoff loading to the Site, as well as to minimize materials loading from work areas within the Site and the Valatie Kill. Silt fencing was anchored in place using sand bags and was typically installed along the perimeter of those areas with increased potential for erosion and sedimentation (e.g., access road slopes), as well as at the downstream limits of the work area (i.e., along the banks of the Valatie Kill). Hay bales were added to sections of the silt fencing where velocities and materials loading had the potential to be higher, as well as along access roads and the MSDP to minimize runoff and erosion (see Site photographs in Appendix B). The silt fencing, sand bags, and hay bales were removed in the spring of 2004, upon completion of the restoration activities.

## 2.5 Support Area

#### 2.5.1 Materials Staging and Dewatering Pad (MSDP)

The MSDP was constructed adjacent to the tennis court on the east side of the Valatie Kill and measured approximately 60 feet by 250 feet (Figure 3). Hay bale berms were constructed around the staging area and a 40-millimeter (mil) HDPE liner was laid over geotextile fabric to form a liner system for staging and dewatering materials. At the end of each work day and during periods of precipitation, materials within the MSDP were covered with a secured 6-mil polyethylene liner. TSCA and non-TSCA materials were separated in the MSDP; non-TSCA materials were staged up-slope of TSCA materials. Water was collected at the low end of the MSDP and processed through the water treatment system described below, in Section 2.5.3. Photographs of the MSDP are included in Appendix B.

#### 2.5.2 Decontamination of Personnel, Vehicles, and Equipment

Personnel, vehicles, and equipment all underwent decontamination before leaving each work area and after handling TSCA materials. Routine decontamination measures included:

- Removing gross contamination from the outer clothing and boots of personnel leaving the Site;
- Removing any contaminated personnel outer garments and gloves and disposing of them in waste receptacles; and
- At the MSDP, pressure washing vehicles and equipment that directly contacted PCB-containing materials. SLC then performed wipe sampling on the equipment as part of the pre-demobilization inspection. The wipe sample laboratory analytical results are presented in Table 5 and are included in Appendix E.

Waste water generated during equipment cleaning was collected in the MSDP and treated by the on-site water treatment system (see Section 3.4). Solids and other materials generated during cleaning of equipment used in TSCA areas were collected and disposed of with TSCA materials. Likewise, solids and other materials generated during cleaning of equipment used in non-TSCA areas were collected and disposed of with other non-TSCA materials.

#### 2.5.3 **Water Treatment Area**

The water treatment area was located adjacent to the MSDP, on the west side of the access road, and measured approximately 100 feet by 30 feet (Figure 3). A water treatment system consisting of fractionation tanks on the front end for water storage, filtration (for solids removal), and granular-activated carbon (for adsorption of PCBs) was assembled to treat water generated during the RA and associated decontamination activities. Specifically, water was pumped from the MSDP, via a sump pump, into a fractionation tank to allow settling. Waters were pumped in series through two bag filters, equipped with 30-micron polyester filter bags and through the carbon vessels, consisting of two 1,000-pound carbon canisters. Water then passed through another bag filter equipped with a 10-micron polyester bag and into a second fractionation tank for storage and testing prior to discharge to a NYSDEC-approved dissipation gallery. A photograph of the water treatment area is included in Appendix B.

#### 2.6 **Temporary Water Diversion**

Temporary water diversion was performed throughout implementation of the RA to allow for the removal of materials in-the-dry, to the extent possible. Primary water diversion was accomplished through the use of a bladder dam. Localized diversion was accomplished, via sump pumps for the duration of the RA, as needed. Diversion piping was used to transport Valatie Kill flow from upstream of the bladder dam to downstream of the

removal area. As indicated in Section 2.5.3, all diverted water was discharged through NYSDEC-approved dissipation galleries. The approximate location of the bladder dam is depicted on Figure 4 and a photograph of the bladder dam is included in Appendix B.

On October 27, 2003 extraordinarily heavy rains caused the bladder dam to move from its installed position and become damaged beyond repair. As of that date, all materials designated for removal and disposal had been removed from the Site, and all areas had been backfilled. Following this date, localized diversion methods were used, as needed, for the remainder of the RA.

## 2.7 Air Monitoring

Air monitoring was conducted, as prescribed in the RFP, at locations around the perimeter of the work area during project activities that involved either excavation or materials handling. The purpose of the air monitoring was to gauge the contribution, if any, of remedial activities to the ambient presence of airborne particulates and volatile organic compounds (VOCs). Air monitoring was conducted in general accordance with NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) #4031 – *Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites* (NYSDEC, 1989), and the New York State Department of Health (NYSDOH) generic Community Air Monitoring Plan (CAMP) (RFP Attachment E, BBL, 2003a). TAGM 4031 and CAMP provided the basis for implementing the particulate and contaminants (i.e., VOCs) monitoring program as an element of the project's HASP (BBL, 2002c).

SLC conducted air monitoring – using a PDR-1000 particulate dust monitor and a Mini-Rae 2000 for VOCs – which consisted of both visual inspection of the Site for airborne particles and monitoring when precipitation was not occurring or had recently occurred. Air monitoring was conducted at various locations along the perimeter of the work area, depending on the excavation configuration.

The action level for particulate dust was 150 micrograms per cubic meter ( $\mu$ g/m³) above the corresponding upwind value, in compliance with the NYSDEC's TAGM 4031, and 25 parts per million (ppm) for total organic vapor levels, in compliance with the NYSDOH's CAMP. There were no detections for organic vapor levels. All particulate dust readings were well below the action level, ranging from 1 to 40  $\mu$ g/m³.

Air monitoring field data are included in Appendix F. Note that the recorded air monitoring data must be multiplied by 1,000 to obtain the actual reading (e.g., 0.150 noted on the data form equals 150  $\mu$ g/m³).

### 2.8 Survey Activities

To confirm the removal of targeted materials, material removal areas (i.e., Theissen polygon boundaries and surface/bottom elevations) were surveyed before and after materials were excavated. Excavated polygons were also surveyed following backfilling to document final restoration grade.

Surveying activities, including locating and demarcating samples, grid layout, and related tasks were performed by WDS, a New York State licensed independent third-party surveyor retained by SLC.

## 3. Remedial Activities

Material removal activities occurred between September 9, 2003 and October 24, 2003, in accordance with the RAWP (BBL, 2002a), RFP (BBL, 2003a), and approved field changes (Appendix A). The material removal methods and associated activities are described below.

#### 3.1 Removal Activities

As discussed in Section 1, the Site was organized into three removal areas (NA, SA, and SB), which were then subdivided into a total of 40 Theissen polygons – 18 polygons in NA, 16 in SA, and six in SB. As stated in Section 1, the design estimated that approximately 2,173 cy of materials would be removed from the Site (See Table 1 for detailed breakdown). A total of approximately 2,171 cy of material were removed from Area 28 (volume determined from as-built survey and removal depths reported in field notes with NYSDEC-approved changes), as indicated in the table below. Materials were removed using conventional excavation methods, generally from upstream to downstream: beginning in polygon NA-60, continuing to the SA polygons, back into the remaining NA polygons, and finishing in the SB polygons. The timeframe of removal activities in each area is also indicated in the table below.

#### **Summary of Removal Activities**

Removal Area	Volume of Material Removed (cy)	Timeframe		
NA	1,630	September 9, 2003 to October 23, 2003		
SA	429	September 10, 2003 to October 13, 2003		
SB	112	October 10, 2003 to October 24, 2003		

Post-excavation survey activities were conducted to document the lateral and vertical extent of excavation activities. As-built survey documentation is contained in Appendix G, and is included on as-built figures in this CR, as appropriate.

Three types of field changes occurred during material removal activities: 1) the target excavation depth was modified in certain polygons due to equipment refusal; 2) certain non-TSCA intervals were excavated as TSCA materials to streamline excavation activities; and 3) minor adjustments were made to the extent of excavation in certain polygons to minimize impacts to established trees.

Prior to completion of excavation at each polygon, all final excavation depths and field changes were approved by the on-site NYSDEC representative, as warranted, and were confirmed with real-time survey data, at a minimum. In several cases, equipment refusal was noted prior to achieving the anticipated termination depth. A representative photograph of sub-gradient material causing an instance of equipment refusal is included in Appendix B. In general, refusal was caused by a very hard, till-like stratigraphic unit found below the typically softer, more clayey, targeted material. This type of field change is described in detail below. In four polygons (NA-62, NA-65, NA-70, and NA-78), anticipated excavation depths were not reached due to equipment refusal. The anticipated and actual excavation depths (in feet) for these polygons are summarized in the following table:

Polygon Excavation Depths - Altered Due to Equipment Refusal

Polygon	Anticipated Intervals (feet)		Actual Intervals (feet)		Adjustments
	TSCA	Non- TSCA	TSCA	Non- TSCA	
NA-62	ł	0 to 5	-	0 to 5 (see comments)	Refusal at 2.7 feet below ground surface (bgs) at delineation point SB-59 (Figure 4) and at 3.2 feet bgs between delineation points. SB-59 & SB-50 along the southeastern side of this polygon due to hard, till-like material. The remainder of the polygon was excavated to 5 feet bgs.
NA-65	2 to 5	0 to 2; 5 to 6	0 to 4.5		Refusal from 4.0 to 4.5 feet bgs throughout polygon due to hard, till-like material (refusal at 2.0 feet bgs in southwest corner).
NA-70	4 to 5	0 to 4; 5 to 6	3.5 to 5.2 (south half); 3.5 to 6.0 (north half)	0 to 3.5	Refusal 5.2 feet bgs in the southern half of the polygon.
NA-78	0 to 6	0 to 6		0 to 6 (see comments)	Refusal from 5.6 to 5.8 feet bgs along the SE side of polygon (between delineation points SB-39 & SB-40) due to hard, till-like material. The remainder of the polygon was excavated to 6 feet bgs.

#### Note:

In five polygons (NA-61, NA-65, NA-66, NA-70, and NA-71), some non-TSCA designated material was removed and disposed as TSCA material to streamline removal activities. The adjustments to removal intervals were conservative in that: 1) the uppermost layer (the non-TSCA layer in all cases) was removed to ½-foot

<sup>1. --</sup> No equipment refusal experienced among this type of material.

shallower than the design interval; or 2) the entire segment was removed as TSCA material. Anticipated and actual removal intervals for TSCA and non-TSCA materials are summarized in the following table:

Polygon Excavation Intervals - Modified TSCA/non-TSCA

Polygon	Anticipated I	ntervals (feet)	Actual Intervals (feet)		
, 90	TSCA	Non-TSCA	TSCA	Non-TSCA	
NA-61	3 to 3.5	0 to 3	2.5 to 3.5	0 to 2.5	
NA-65*	2 to 5	0 to 2; 5 to 6	0 to 4.5		
NA-66	1 to 2.5	0 to 1	0 to 2.5		
NA-70*	4 to 5	0 to 4; 5 to 6	3.5 to 5.2 (south half) 3.5 to 6 (north half)	0 to 3.5	
NA-71	5 to 6	0 to 5; 6 to 7	4.5 to 7	0 to 4.5	

#### Notes:

The presence of trees or extensive tree root systems in two polygons resulted in NYSDEC-approved adjustments to the anticipated removal area. These adjustments are summarized in the following table:

Polygon Excavation Depths - Tree-Related Adjustments

Polygon	Adjustments			
NA-60	A portion of the southwest corner of this polygon was not excavated to final depth to prevent the disturbance of tree roots for a 14-inch diameter poplar tree present in the southwest corner of this polygon.			
NA-80	A 4-square-foot area was not excavated to final depth at the west corner of this polygon as a large tree was present just inside the excavation limits.			

Indicates that the polygon was not excavated to depth due to equipment refusal as noted on page 3-2 in the table Polygon Excavation Depths - Altered Due to Equipment Refusal.'

<sup>2. --</sup> Indicates that no portion of anticipated interval was ultimately excavated as non-TSCA.

3.2 Post-Construction Investigation, Sampling, and Analysis

As prescribed in the NYSDEC-approved Post-Construction Sampling Protocol (Appendix A), post-construction

investigation, sampling, and analysis was conducted during the RA. Representative sampling locations (a total

of 10 samples; Table 3, Figure 5) were selected by the NYSDEC based on post-removal conditions and

surveying. One sample (NA-65) of the hard, till-like material was collected from a polygon where the final

removal depth had been adjusted due to refusal.

After the excavation of each polygon, WDS surveyed several locations of the excavation bottom to ensure that

the target depth for removal had been met. Ten post-construction samples were collected after excavation

activities in certain polygons were complete, and prior to backfilling each respective polygon (Table 3). The

samples (SA-69, SA-85, SA-90, SA-97, NA-61, NA-65, NA-71, NA-77, NA-79, and SB-46) (Figure 5) were

collected from the next 6 inches below grade by hand, using clean stainless steel equipment (Appendix C).

At polygon SA-69, analysis of the post-construction samples revealed a PCB level of 0.92 ppm. As a

conservative measure, and with the concurrence of NYSDEC, SLC excavated an additional 6 inches of material

around the confirmatory sample point in polygon SA-69.

Results of post-construction sampling confirmed that materials had been removed in accordance with the RAWP

and approved field changes. Figure 5 depicts the extent of excavation in the removal areas and identifies the 10

sample locations and related data. Laboratory analytical results for the post-construction sampling are provided

in Appendix C.

3.3 Removed Materials Handling and Transportation

Removed materials were transported to the MSDP, gravity dewatered, and covered daily with 6-mil

polyethylene sheeting to minimize the potential for release as removed materials were loaded, and during rain

events to prevent re-wetting. HDPE was placed under equipment during loading and unloading of materials.

The MSDP was constructed to collect fluids produced during dewatering and incidental rainfall (Section 3.4).

As indicated in Section 2.5.1, drained waters from materials were collected on the MSDP and treated by the on-

site water treatment system.

When necessary, the materials were solidified with cement kiln dust (CKD) prior to transport for off-site

disposal. Residual solid wastes (used hoses, carbon from the water treatment system, personal protective

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equipment (PPE), bag filters, liner materials, silt fence, hay bales) were disposed with the appropriate materials waste stream (i.e., either TSCA or non-TSCA).

TSCA materials were transported from the Site to CWM Chemical Services, in Model City, New York (near Buffalo) and non-TSCA materials were transported to High Acres disposal facility located in Fairport, New York (near Rochester).

#### 3.4 Water Treatment and Discharge

As discussed in Section 2.5.3, a water treatment system was assembled to treat water generated during the RA and decontamination procedures (treatment procedure details provided in Section 2.5.3). After treating a batch of water (generally ~20,000 gallons), samples were collected for analysis of PCBs, oil and grease, total suspended solids (TSS), and pH, in accordance with the Effluent Limitation and Monitoring Requirements presented in the RAWP (BBL, 2002a). If sample results were unacceptable, that batch of water was re-treated and re-sampled (see Table 4).

Once the laboratory reported that the water had tested below discharge limits and results were approved by the NYSDEC, the water was discharged to the ground surface via a dissipation gallery consisting of silt fencing and hay bales on the southeast side of the Valatie Kill. A total of approximately 64,300 gallons (four batches consisting of approximately 18,000, 19,000, 20,000 and 7,300 gallons) of water were treated and discharged throughout the implementation of the RA. The laboratory analytical data for all batches is presented in Table 4 and included in Appendix D.

## 4. Stream and Wetland Restoration

Upon completion of the material removal activities, restoration of scrub-shrub, emergent wetlands, banks, and enhancement of substrate in portions of the Valatie Kill commenced. Restoration activities and construction of environmental structures were undertaken in accordance with the Stream and Wetland Restoration/Enhancement Specifications Plan (SWR/ESP) (Attachment to RFP, BBL, 2003a). Prepared as a component of the Nationwide Permit (NWP) Application to the United States Army Corps of Engineers (USACE) for the Site, the SWR/ESP addressed stream and wetland restoration and enhancement activities to mitigate impacts from the RA. Restoration and planting plans, as presented in the RFP (BBL, 2003a), can be found on Figures 6 and 7. Photographs of restoration activities are included in Appendix B.

#### Wetlands 4.1

Following removal of materials, approximately 0.24 acre of emergent and scrub-shrub wetlands were restored (Section 3.0 of RFP). After the completion of excavation activities in Wetlands 1 (0.01 acre) and 4 (0.2 acre), Wetland 1 was eliminated as a result of bank stabilization efforts along the eastern bank of the Valatie Kill. Consequently, the restoration of Wetland 4 included an additional 0.03 acre to mitigate the loss of Wetland 1 (Figure 8). Wetland restoration details are provided in MP-02210 – Wetland Restoration of the RFP (BBL, 2003a), and are described in the following sections.

#### 4.1.1 **Wetland Grading**

Wetland topography and the channel morphology adjacent to the wetland were restored to maintain the preexcavation hydrologic interaction between the stream and the wetland. The elevational contours for the restored wetland are shown on Figure 8 and vary between the elevations of 430 feet above mean sea level (amsl) and 432 feet amsl. To allow for the creation of microhabitats and variability in degrees of soil saturation and inundation, the surface of the wetland was finished with hummocks, hollows, and undulations throughout.

Two slightly reduced elevation inlets were constructed in the restored wetland to allow Valatie Kill water to enter the wetland during high-flow conditions. The upstream inlet is located in the velocity shadow of the transverse bar structure (Section 4.4), at an elevation of 431.5 feet, to inhibit short-circuiting of base flows through the wetland (Figures 8 and 9). The downstream inlet is connected with the backwater area at an elevation of approximately 430 feet, to provide the primary hydrology to the wetland at base-flows (Figures 8

and 9). The backwater area that currently exists at the southwest corner of the wetland was restored to its original elevations, which ranged between 420 and 430 feet amsl.

Final grading was accomplished in the fall of 2003. In the spring of 2004, wetland grading was re-evaluated and it was determined that portions of the wetland had changed since the fall. To compensate, SLC installed additional topsoil over the wetland and re-graded the area, where needed.

#### 4.1.2 Wetland Topsoil

At the completion of removal activities, Wetland 4 was backfilled with general fill (MP-02221 – Backfill Materials) to 1 foot below the final grades, as discussed in Section 4.1. Final elevations were achieved, by installing 1 foot of wetland topsoil, following completion of all removal activities, as specified in MP-02210 – Wetland Restoration (provided with the RFP [BBL, 2003a]). Wetland topsoil obtained by SLC for use in achieving final elevations was determined, by BBL review of SLC's specification submittal on November 5, 2003, to be generally consistent with the grain size distribution, pH, and total organic carbon (TOC) content of the pre-disturbance wetland soil.

## 4.1.3 Vegetation

In spring 2004, replacement wetland soil was placed to final grades in the restored wetland and vegetation was planted in both the wetland and on the recently restored banks. Wetland seed was applied at a rate of 16 pounds per acre. After seeding, a biodegradable erosion control fabric (North American Green C125BN) was installed over the entire wetland as well as the intermediate armored banks (as described below) to provide erosion protection from storm flow prior to vegetation establishment. Wetland shrubs were planted through the erosion control blanket. Species and planting densities for vegetation in the enhanced wetland are presented on Figure 9. Details of the wetland vegetation seeding and planting methodologies are presented in the MP-02210 – Wetland Restoration (provided with the RFP [BBL, 2002a]).

Also in spring 2004, approximately 1,370 square feet (0.03 acre) of the previously unvegetated backwater channel area was planted with bare root herbaceous vegetation to create an enhanced emergent wetland to mitigate the loss of the 0.01 acre emergent wetland on the east shore of the Valatie Kill. The bank areas surrounding the backwater wetland were seeded with the wetland seed mix and covered with an erosion control blanket (North American Green S150), as required for the soft armor bank in the SWR/ESP (BBL, 2003d).

#### 4.2 Valatie Kill Substrate

Based on chemical analysis of the Valatie Kill substrate, approximately 101 cy of substrate, including a portion of the mid-stream gravel bar, were removed as part of remedial activities (see Section 3 for more detail). To enhance and diversify the substrate of the Valatie Kill, areas with less than or equal to 1 foot of material removed from the surface were restored to original grades with substrate material (MP-02221 – Backfill Materials) consisting of 80% gravel between 10 and 50 millimeters (mm) in diameter and 20% gravel/cobble between 50 and 100 mm in diameter. Areas with greater than 1 foot of material removed from the surface were restored with general fill overlaid with one foot of substrate material to the existing bed elevation immediately upstream of the removal area (MP-02221 – Backfill Materials). Areas that received substrate enhancement are indicated on Figure 8. Since the constructed transverse bar and riffle area replaced and functionally enhanced the gravel bar, the portions of the gravel bar that were not disturbed during remedial activities were removed to create a consistent upstream-to-downstream grade. The removed gravel bar material was used as general fill elsewhere on the Site, as approved by the NYSDEC.

#### 4.3 Banks of the Valatie Kill

Based on their location and potential exposure to erosive forces of flowing water, bank areas disturbed by remedial activities were restored to pre-disturbance grades and protected from erosion. In areas exposed to potentially moderate flows, banks were restored with intermediate armor; and areas with sharp curves and bank points were restored with hard armor. In addition, a portion of one bank along the restored wetland was restored using a crib wall to protect it from erosion and to enhance the habitat value of the wetland bank for fish. A transverse bar was installed upstream of the crib wall to redirect base flow away from the wetland bank. The locations of the different bank restoration applications are indicated on Figure 8. The following sections present a summary of the installation of the restored banks and constructed structures.

#### 4.3.1 Soft Armor Bank

The soft armor bank restoration methodology consisted of using general fill (MP-02221 – Backfill Materials) to restore the bank to an elevation of 1 foot below original grade, and creating final elevations with one foot of topsoil (MP-02209 – Topsoil and Seeding). Upland banks were then seeded with an erosion control seed mix, also specified in MP-02209. Seeding in the wetland area used a seed mix specific to wetlands (MP-02210 – Wetland Restoration). Since the restoration, seeding, and planting were performed in the spring – before vegetation had a chance to establish and anchor the bank, an erosion control fabric (North American Green

S150) was installed on the bank. Figure 10 presents a typical cross-section of the soft armor bank restoration utilized in the portions of the Site indicated on Figure 8. As shown, this soft armor option was applied to the portion of the bank along the backwater segment of the restored wetland.

#### 4.3.2 Intermediate Armor Bank

The intermediate armored banks were restored to original grade with general fill (MP-02221 – Backfill Materials) and 1 foot of topsoil (MP-02209 – Topsoil and Seeding), as described in Section 4.3.1. The intermediate armor option was similar to the soft armor design, but utilized a stronger and more durable erosion control fabric (North American Green C125BN). The toe of the blanket was anchored at the bottom with 1 foot of Type II riprap (MP-02221 – Backfill Materials), from 1 foot below the toe of the bank slope to the mean water elevation to protect against undercutting.

The intermediate armor bank on the west side of the stream was restored in the fall of 2003 and the bank was covered with the biodegradable erosion control blanket to 3 feet above the mean water elevation up the bank to protect the bank from high flows. Seeding of all other intermediate armored banks occurred in the spring of 2004.

Seeding with an erosion control seed mix, as specified in (MP-02209 – Topsoil and Seeding), was performed prior to blanket installation in upland areas. Seeding in the wetland area utilized the wetland seed mix and erosion control fabric (North American Green C125BN), as specified on Figure 7. The intermediate armor bank restoration was utilized in the portions of the Site specified on Figure 8, except for one location. Based on observed post-construction field conditions, it was determined that an undisturbed bank area required hard armoring, and an area of equal length that was proposed for hard armor only required intermediate armor. Figure 8 presents the final locations of the different bank restoration options.

#### 4.3.3 Hard Armor Bank

Banks requiring hard armor were restored with general fill (MP-02221 – Backfill Materials) and brought to final grade with 1 foot of Type II riprap (MP-02221 – Backfill Materials) from 1 foot below the toe of the slope to the top of bank. This option was utilized in areas of potentially higher shear stress, such as sharp bends and areas of flow constriction. The bank locations where hard armoring was applied are presented on Figure 8.

#### 4.3.4 Crib Wall

A crib wall was constructed to protect a portion of the bank along the restored wetland, and also served as a fish habitat enhancement structure. The crib wall consisted of a series of overlapping hardwood logs laid perpendicular to each other, embedded along the bank below the mean water elevation, and pinned together for stability (Figure 8). Live willow cuttings were installed between logs in the upper layers of the crib wall facing the water, and general fill (MP-02221 – Backfill Materials) was used to fill the structure behind the willows to create a natural appearing vegetated bank (Figure 8). Wetland topsoil (MP-02210-1 – Wetland Restoration) formed the final elevation above the cribs. In addition, Type II riprap (MP-02221 – Backfill Materials) was installed beneath the face of the structure to stabilize the toe of the bank. This structure was utilized to protect the northern bank of the stream at the Site, downstream of the transverse bar, as shown on Figure 8.

#### 4.4 Transverse Bar

A transverse bar was created upstream of the restored wetland area to redirect base flow into the main channel, as shown on Figure 8. The transverse bar is a submerged angled weir consisting of rock material that produces a local elevation rise, which can improve fish habitat by producing variability in both stream depth and velocity. The bar was constructed with Types II and III riprap, ranging in size from 6 to 12 inches in diameter (MP-02221 – Backfill Materials). The bar was installed at an angle to the stream bank to direct water flow in the desired manner and had a steeper face upstream than downstream. The portions of the bank immediately upstream and downstream of the bar were hard-armored to the top of the bank to protect them from eroding.

#### 4.5 Wetland and Stream Bank Planting

TES performed the wetland and stream bank planting between May 3, 2004 and May 5, 2004. Shrub planting occurred along an approximate 60-foot section above the top of the east bank (Figure 9). Wetland trees and shrubs were planted as outlined in the SWR/ESP (BBL, 2002d).

#### 4.6 Monitoring

Per the NWP, the environmental structures and restored wetland will be monitored annually for 5 years. This annual monitoring will include:

Photographing the Site under normal flow conditions, following a high-flow event;

- Conducting a Level II stream classification including channel dimensions at bank-full in both riffle and pool sections, longitudinal reach profiles, a pebble count, and the identified stream type;
- Describing the existing condition of the channel and environmental structures, stream conditions upstream and downstream of the Site, and any observed use of the Site by fish and wildlife; and
- Quantifying wetland plant survival and percentage of ground cover for comparison to annual performance standards presented in the SWR/ESP (BBL, 2002d).

The results of the annual monitoring will be documented in reports to the NYSDEC and USACE.

5. Overall Restoration and Demobilization

After construction activities were completed in December 2003, excavation/support equipment, the MSDP,

unused supplies and materials, and the project trailers were dismantled and demobilized from the Site. At the

request of the landowner, the temporary utility connections installed at the new utility pole were terminated in-

place and de-energized upon completion of the RA.

Prior to demobilization, equipment that had come into contact with removed materials (e.g., excavators, dump

trucks) was subjected to wipe sampling, in accordance with the RAWP (BBL, 2002a). All sample results were

less than 1 ug/100 cm<sup>2</sup> (BBL, 2002a). The results are presented in Table 5 and in Appendix E.

In addition to in-stream restoration, other portions of the work area were restored in the spring of 2004,

including the support areas, access roads constructed during the RA, and existing parking lot/access roads

(Figures 6, 7, 8, and 9). Restoration activities for these areas included removing materials that were not part of

the Site prior to the RA (e.g., additional access roads), placing a 6-inch-thick layer of topsoil to match

surrounding grades, planting vegetation (e.g., seeding, trees), and repairing surfaces, where needed.

The restoration work will be maintained and adequately protected using erosion control measures, as appropriate

and discussed below, such that conditions similar to pre-removal conditions exist during a period of 1 year, as

described in the RFP (BBL, 2003a).

5.1 Permanent Erosion and Sedimentation Controls

Permanent erosion and sedimentation controls applied at the Site included grasses and trees. The furnishing and

placement of topsoil, seed, and mulch were conducted in accordance with MP-02209 - Topsoil and Seeding

(provided with the RFP [BBL, 2003a]). When required to attain germination, the seeded areas were watered in

such a manner as to prevent washing out of the seed.

Trees greater than 6 inches in diameter, at a height of approximately 4 feet, damaged, destroyed, or removed

during execution of the work, were replaced with like species, at least 5 feet tall, in accordance with procedures

set forth in the RFP (BBL, 2003a). Wetland and stream areas within Area 28 were restored in accordance with

the SWR/ESP (BBL, 2003d).

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In addition to the monitoring activities indicated in Section 4.6, the permanent erosion and sedimentation controls will continue to be maintained in an acceptable condition for a period of 1 year following the date of completion (i.e., through August 2005).

## 6. References

- Blasland, Bouck and Lee, Inc, (BBL). 2003a. Request for Proposal, Remedial Action Area 28. Loeffel Site Environs Operable Unit 3. Prepared for the General Electric Company, Albany, NY.
- BBL. 2003b. Letter dated April 28, 2003 to NYSDEC Reporting Predesign Sampling Results in Area 28. Loeffel Site Environs Operable Unit 3. Prepared for the General Electric Company, Albany, NY.
- BBL. 2002a. Area 28 Remedial Action Work Plan. Loeffel Site Environs Operable Unit 3. Prepared for the General Electric Company, Albany, NY.
- BBL. 2002b. Area 28 Remedial Action Work Plan, Construction Quality Assurance Plan. Loeffel Site Environs Operable Unit 3. Prepared for the General Electric Company, Albany, NY.
- BBL. 2002c. Area 28 Remedial Action Work Plan, Health and Safety Plan. Loeffel Site Environs Operable Unit 3. Prepared for the General Electric Company, Albany, NY.
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- General Electric Corporate Environmental Programs. 2003. Hazardous Materials Transportation Security Plan.
- New York State Department of Environmental Conservation. 1989. TAGM #4031 Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites.

# **Tables**



# Table 1 General Electric Company Loeffel Site Environs Area 28 Remedial Action Completion Report

#### **Summary of Removal Activities**

	Polygon ID <sup>2</sup>		Volume (cubic yards)				
Removal Date <sup>1</sup>		TSCA	Non-TSCA	TSCA	Non-TSCA		
Date		Estir	Estimated <sup>4</sup>		Actual <sup>5</sup>		
9/11/2003	NA60	0.0	54.0	0.0	54.0		
10/9/2003	NA61	14.0	85.4	28.5	71.2		
10/7/2003	NA62	0.0	220.0	0.0	274.8		
10/12/2003	NA64		7.0	0.0	14.0		
10/9/2003	NA65	156.5	156.5	208.4	0.0		
40/0/0000	NA 00	40.0	07.0	00.0	0.0		
10/9/2003	NA66	40.9	27.3	68.2	0.0		
10/12/2003 10/12/2003	NA67 NA68	0.0	18.9 15.9	0.0	28.3 15.9		
10/12/2003	INAOO	0.0	15.9	0.0	15.9		
10/9/2003	NA70	44.0	222.0	93.3	155.4		
10/3/2000	14/1/0	77.0	ZZZ.O	30.0	100.4		
10/21/2003	NA71	52.0	262.2	130.3	236.0		
10/11/2003	NA75	0.0	17.9	0.0	17.9		
10/11/2003	NA76	0.0	19.3	0.0	19.3		
10/13/2003	NA77	0.0	32.4	0.0	32.4		
10/22/2003	NA78	0.0	145.3	0.0	135.6		
10/23/2003	NA79	0.0	21.3	0.0	21.3		
10/22/2003	NA80	0.0	13.7	0.0	13.7		
10/12/2003	NA82	0.0	6.1	0.0	6.1		
10/12/2003	NA83	0.0	4.7	0.0	4.7		
9/18/2003	SA69	0.0	36.9	0.0	36.9		
9/17/2003	SA71	0.0	36.0	0.0	36.0		
10/13/2003	SA72	0.0	45.5	0.0	45.5		
9/15/2003	SA81	0.0	26.3	0.0	26.3		
10/12/2003	SA82	0.0	13.8	0.0	13.8		
9/15/2003	SA85	0.0	11.8	0.0	11.8		
9/15/2003	SA86	0.0	10.0	0.0	10.0		
9/15/2003	SA87	0.0	6.4	0.0	6.4		
9/15/2003	SA88	0.0	3.4	0.0	3.4		
9/15/2003	SA90	0.0	38.5	0.0	38.5		
9/15/2003	SA91	0.0	26.3	0.0	26.3		
9/11/2003	SA93	0.0	38.9	0.0	38.9		
9/11/2003	SA94 SA96	0.0	58.0 15.6	0.0	58.0 15.6		
9/11/2003	SA96 SA97	0.0	15.6 31.6	0.0	15.6 31.6		
9/11/2003 9/10/2003	SA97 SA99	0.0	30.4	0.0	30.4		
10/13/2003	SA99 SB33	0.0	4.8	0.0	9.5		
10/13/2003	SB38	0.0	4.9	0.0	4.9		
10/23/2003	SB41	0.0	47.4	0.0	47.4		
10/23/2003	SB46	0.0	44.1	0.0	44.1		
10/23/2003	SB47	0.0	3.6	0.0	3.6		
10/23/2003	SB49	0.0	2.6	0.0	2.6		
.0.20.200	Total (cy)	307	1866	529	1642		

#### Notes

- 1. "Removal Date" is the completion date when all material had been removed from the polygon.
- 2. "Polygon" is the removal area as denoted by the excavation coordinates surveyed prior to and following excavation. Figures 4 and 5 depic respective polygon boundaries.
- 3. TSCA = Toxic Substances Control Act.
- 4. "Estimated" is the estimated removal volume as reported in the RFP.
- 5. "Actual" is the approximate removal volume based on as-built spot elevations and removal depths, and NYSDEC-approved modifications to removal depths reported in field notes.

# Table 2 General Electric Company Loeffel Site Environs Area 28 Remedial Action Completion Report

#### Summary of Shipped Materials<sup>1</sup>

			T (				
Ship	ped Material (	tons)	Shipped Material (tons) cont'd				
Date	TSCA	Non-TSCA	Date	TSCA	Non-TSCA		
0/3/2003		32.43	10/23/2003		32.60		
0/3/2003		31.48	10/23/2003		30.90		
0/3/2003		26.48	10/23/2003		31.15		
0/3/2003		32.85	10/27/2003		30.63		
0/3/2003		29.37	10/27/2003		24.52		
10/6/2003		33.81	10/27/2003		29.07		
10/6/2003		33.88	10/27/2003		26.32		
10/6/2003		32.55	10/27/2003		25.50		
10/6/2003		30.04	10/27/2003		33.43		
10/7/2003		33.32	10/28/2003				
10/7/2003					29.33		
		34.81	10/28/2003		32.03		
10/7/2003		39.39	10/28/2003		30.83		
10/7/2003		33.32	10/28/2003		33.46		
10/7/2003		30.79	10/29/2003		31.69		
10/7/2003		36.19	10/29/2003		28.09		
10/7/2003		33.91	10/29/2003		31.44		
10/7/2003		33.09	10/29/2003		24.75		
10/8/2003		34.60	10/29/2003		29.46		
10/8/2003		29.12	10/29/2003		27.22		
10/8/2003		28.52	10/30/2003		28.03		
10/9/2003		28.79	10/30/2003		32.48		
10/9/2003		32.33	10/30/2003		31.78		
10/9/2003		29.03	10/31/2003		35.27		
10/9/2003		34.27	10/31/2003		32.24		
10/10/2003		33.48	11/4/2003	33.18			
10/10/2003		34.41	11/4/2003	28.67			
10/10/2003		35.41	11/4/2003	28.80			
10/10/2003		33.28	11/4/2003	28.86			
10/10/2003		35.22	11/5/2003	31.67	35.93		
			11/5/2003		30.93		
10/13/2003		32.50		33.26			
10/13/2003		31.27	11/5/2003	30.72			
10/13/2003		32.26	11/5/2003	29.21			
10/13/2003		25.85	11/6/2003	29.96	30.39		
10/13/2003		28.91	11/6/2003	30.89	30.35		
10/13/2003		33.39	11/6/2003	31.84			
10/13/2003		26.55	11/6/2003	32.05			
10/14/2003		30.96	11/7/2003	28.11	26.04		
10/14/2003		29.95	11/7/2003	30.81			
10/14/2003		27.16	11/7/2003	32.31			
10/14/2003		38.06	11/7/2003	30.93			
10/14/2003		32.87	11/10/2003		27.60		
10/14/2003		33.09	11/10/2003		28.59		
10/15/2003		32.05	11/11/2003		32.53		
10/15/2003		32.16	11/11/2003		32.11		
10/15/2003		29.31	11/11/2003		32.40		
10/15/2003		34.96	11/11/2003		29.71		
10/16/2003	37.21	27.66	11/20/2003		37.48		
10/16/2003	29.79	35.48	11/21/2003	25.61			
10/16/2003	26.75	35.75	11/21/2003	26.12			
10/16/2003	29.68	36.18	11/21/2003	32.76			
		30.10					
10/17/2003	29.55	<del>  -</del>	12/1/2003	32.05			
10/17/2003	31.70		12/1/2003	30.94			
10/17/2003	31.02		12/1/2003	32.13			
10/17/2003	30.63		12/1/2003	32.15			
10/21/2003	32.72	25.99	12/1/2003	31.69			
10/21/2003	31.05	30.14	Total	1107	2852		
10/21/2003	30.10	32.09					
10/21/2003	32.12						
10/22/2003		26.96	Notes:				
10/22/2003		28 72		anifost shipping r	ocordo		

#### Notes:

28.72

30.21

- 1. As reported on manifest shipping records.
- 2. "--" Indicates that no material of this designation was shipped on this date.

10/22/2003

10/22/2003

# Table 3 General Electric Company Loeffel Site Environs Area 28 Remedial Action Completion Report

#### **Summary of Post-Construction Sampling Locations**

Location ID	Depth (feet-bgs)	PCB (mg/kg)		
NA-61	3.5 to 4.0	0.0048 J		
NA-65	4.2 to 4.7	0.11		
NA-71	7.0 to 7.5	0.056		
NA-77	2.08 to 2.58	0.01 J		
NA-79	2.0 to 2.5	0.043		
SA-69	1.0 to 1.5	0.92		
SA-85	0.5 to 1.0	0.01J		
SA-90	1.5 to 2.0	0.68		
SA-97	2.0 to 2.5	0.18		
SB-46	4.0 to 4.5	0.036		

#### Notes:

- 1. mg/kg = milligrams per kilogram
- Samples were collected by BBLES at locations and depths chosen by the NYSDEC and analyzed by Adirondack.
- 3. Sample locations are located on Figure 5.
- 4. J = analyte detected below detection limits.

Page 1 of 1 9/30/2004

### Table 4 General Electric Company Loeffel Site Environs

#### Area 28 Remedial Action Completion Report

#### Water Treatment Sample Results

		Batch 1	Batch 1	Batch 2	Batch 2	Batch 3	Batch 3	Batch 4	Batch 4	Batch 4
Parameters	Daily Maximum	Analytical Results	Analytical Results Collected 10/10/2003		Analytical Results Collected 10/31/2003		Analytical Results Collected 11/14/2003		Analytical Results	Analytical Results Collected 12/10/2003
	Discharge Limit <sup>1</sup>	(not discharged) Collected 10/6/2003	(approx. 18,000 gallons, discharged	(not discharged) Collected 10/28/2003	(approx. 19,000 gallons, discharged	(not discharged) Collected 11/12/2003	(approx. 20,000 gallons, discharged	(not discharged) Collected 12/3/2003	(not discharged) Collected 12/9/2003	(approx. 7,300 gallons, discharged
		Collected 10/0/2003	10/11/03)	Collected 10/26/2003	11/4/2003)	Collected 11/12/2003	11/17/2003)	Collected 12/3/2003	Collected 12/9/2003	12/11/2003)
Oil and grease	15 mg/L	<1.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	NS
pН	6.0 to 9.0	9.7	8.5	8.4	NS	8.1	NS	8.4	NS	NS
Total suspended solids	10 mg/L	7	NS	3.5	NS	4	NS	9.5	NS	NS
PCB – Aroclor 1016	0.3 μg/L	ND(0.068)	NS	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.079)	ND(0.065)	ND(0.065)
PCB – Aroclor 1221	0.3 μg/L	ND(0.068)	NS	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.079)	ND(0.065)	ND(0.065)
PCB - Aroclor 1232	0.3 μg/L	ND(0.068)	NS	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.079)	ND(0.065)	ND(0.065)
PCB – Aroclor 1242	0.3 μg/L	ND(0.068)	NS	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.079)	ND(0.065)	ND(0.065)
PCB – Aroclor 1248	0.3 μg/L	ND(0.068)	NS	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.079)	ND(0.065)	ND(0.065)
PCB – Aroclor 1254	0.3 μg/L	ND(0.068)	NS	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.079)	ND(0.065)	ND(0.065)
PCB – Aroclor 1260	0.3 μg/L	ND(0.068)	NS	0.08	ND(0.065)	0.237	ND(0.065)	0.144	0.099	0.068

#### Notes

- 1. According to Attachment C of RFP (BBL, 2003a).
- pH was measured in the field.
- 3. NS = not sampled
- 4. ND = not detected (detection limit)
- 5. Samples were collected by SLC and analyzed by Adirondack.
- 6. Successive sample collections indicate batch was retreated due to previous sample results.

Page 1 of 1 9/30/2004

# Table 5 General Electric Company Loeffel Site Environs Area 28 Remedial Action Completion Report

#### **Equipment Wipe Sample Results**

Sample ID	Sample Collection Date	Total PCB (μg/100 cm²)
CX160 Excavator		
Inside Bucket	12/01/03	<1
Outside Bucket	12/01/03	<1
CAT 325 Excavator		
Right Track	11/13/2003	<1
Left Track	11/13/2003	<1
Bucket-In	11/13/2003	<1
Bucket-Out	11/13/2003	<1
Dump Truck		
Box Bottom #1	10/27/03	<1
Left Front Tire #2	10/27/03	<1
Box Gate #3	10/27/03	<1
Right Rear Tire #4	10/27/03	<1
Primary Fractionation Tank		
948 Wall	12/01/03	<1
948 Bottom	12/01/03	<1
48-WS1	10/17/03	<1
48-WS2	10/17/03	<1
Bobcat		
Skid Steer #1-BL	10/2/03	<1
Skid Steer #2-BR	10/2/03	<1
Skid Steer #3-TRAC	10/2/03	<1
Secondary Fractionation Tank		
254549-Wall	12/16/03	<1
254549-Bottom	12/16/03	<1
Wall	12/17/03	<1
Floor	12/17/03	<1
Vac Truck		
Vac Truck	12/18/03	<1

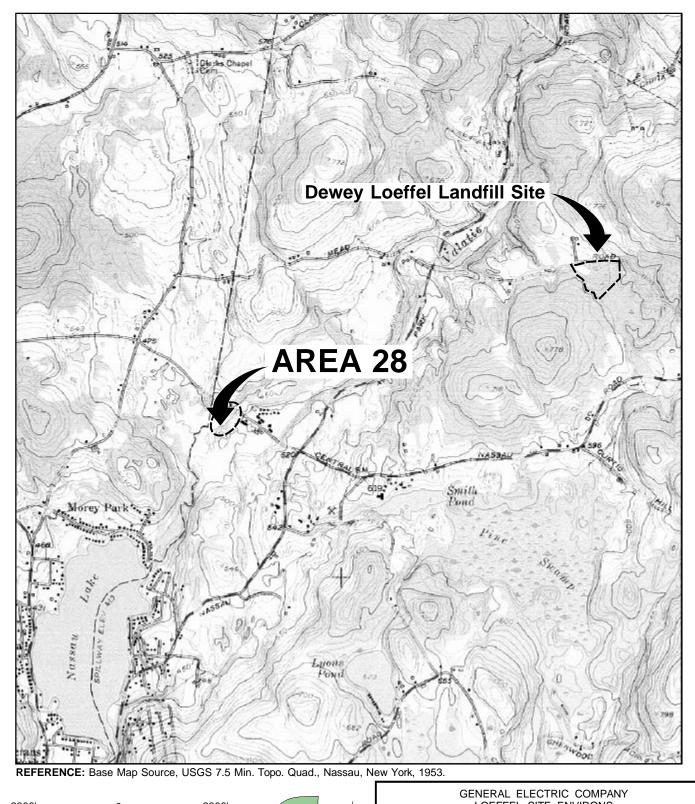
#### Notes

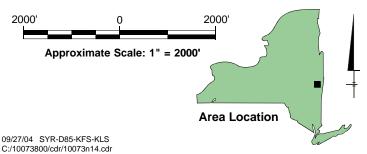
- 1.  $\mu$ g/100 cm<sup>2</sup> = micrograms per 100 square centimeters
- 2. Samples were collected by SLC in acordance with Section 3 of the RFP (BBL, 2003a) and analyzed by Adirondack.

Page 1 of 1 9/30/2004

# **Figures**







LOEFFEL SITE ENVIRONS

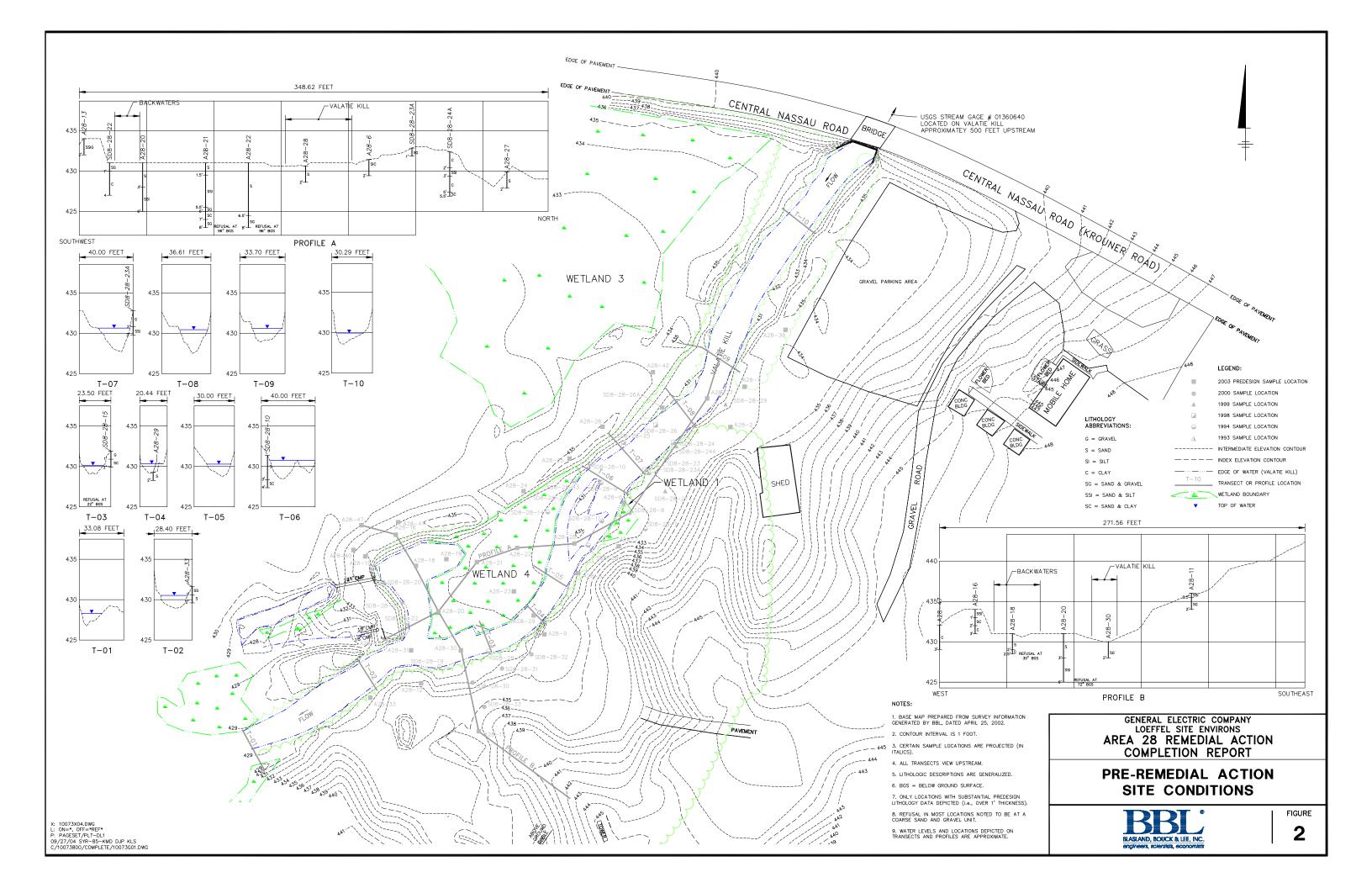
**AREA 28 REMEDIAL ACTION COMPLETION REPORT** 

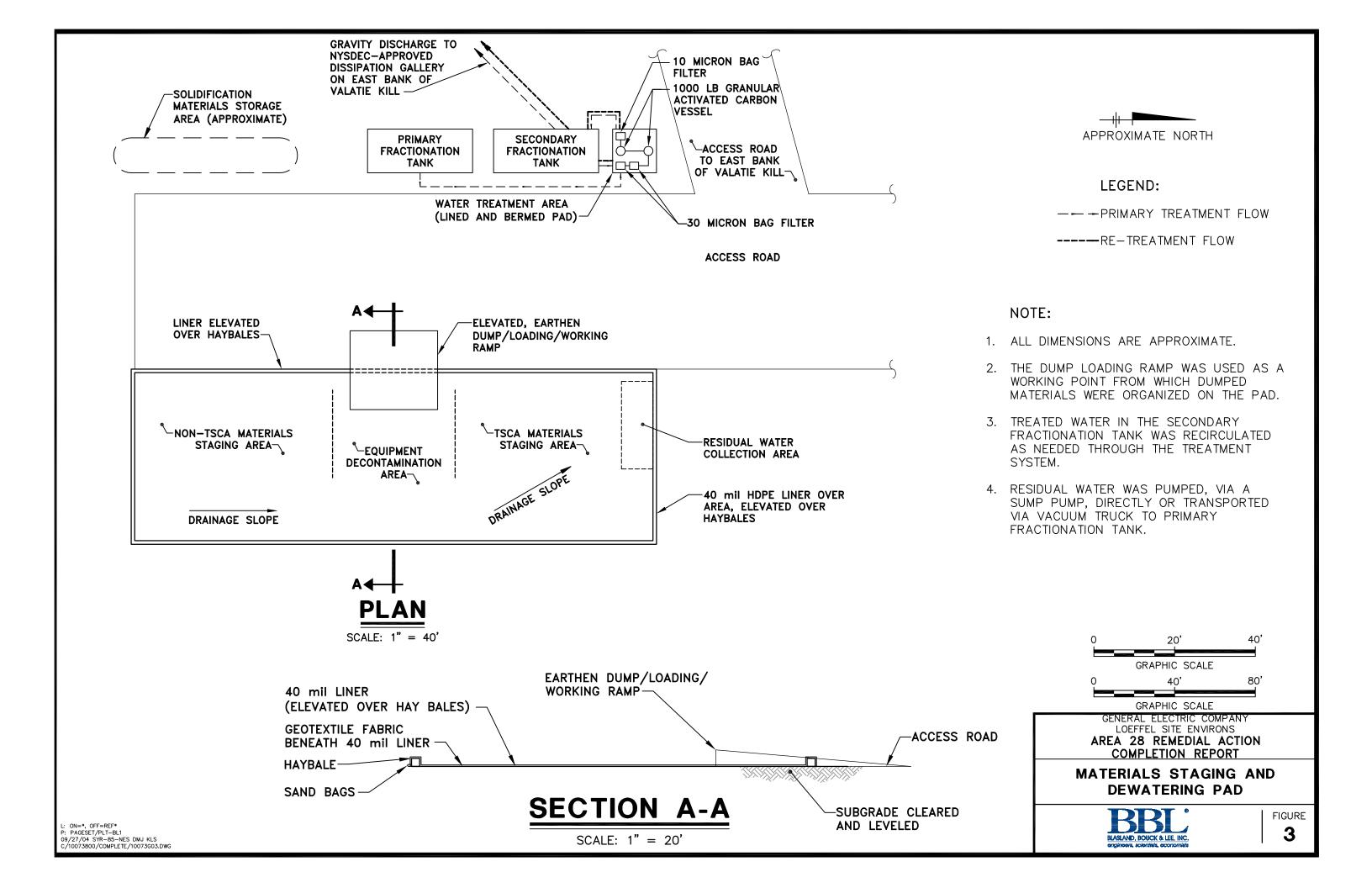
#### SITE LOCATION MAP

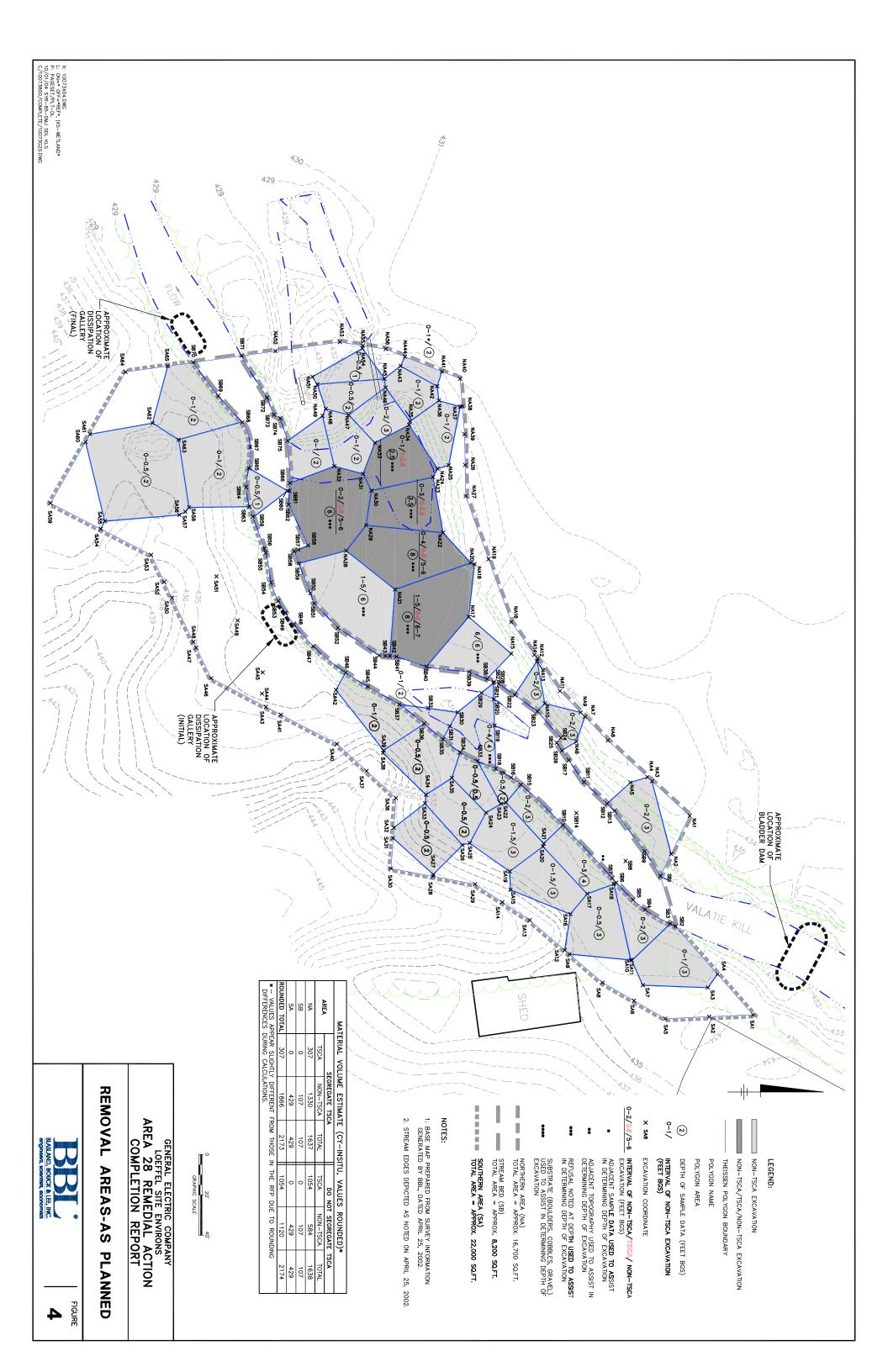


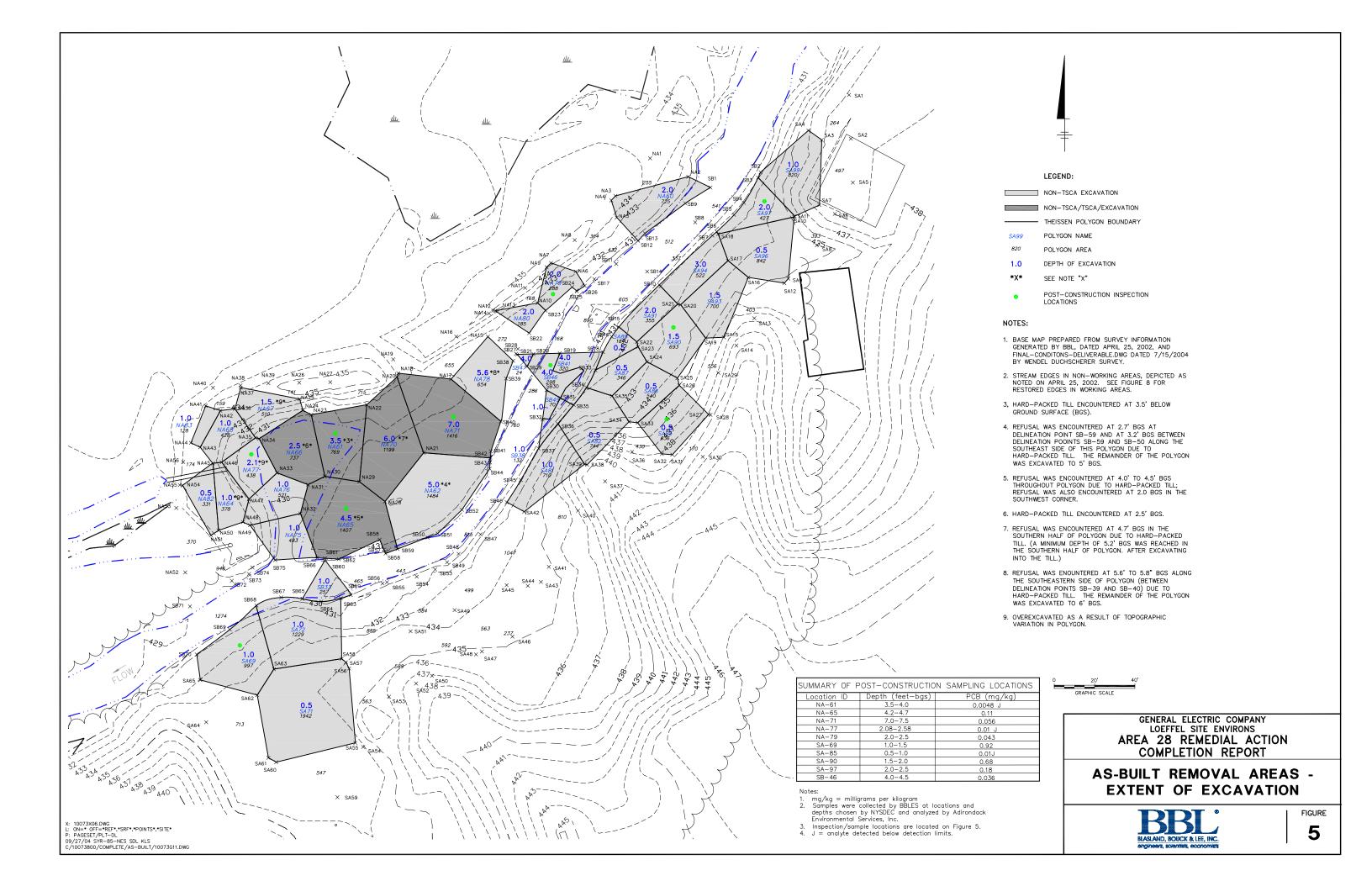
**FIGURE** 

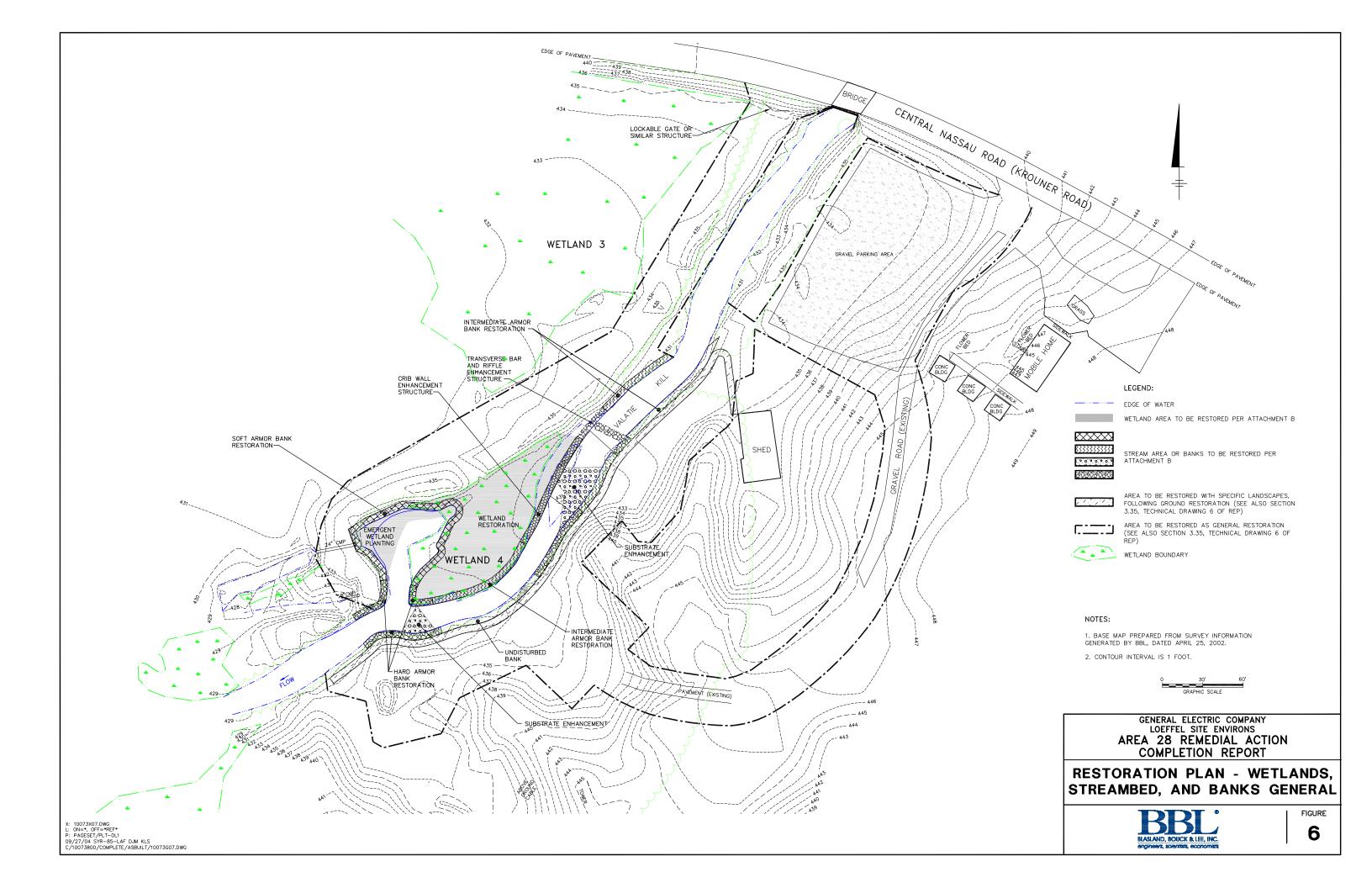
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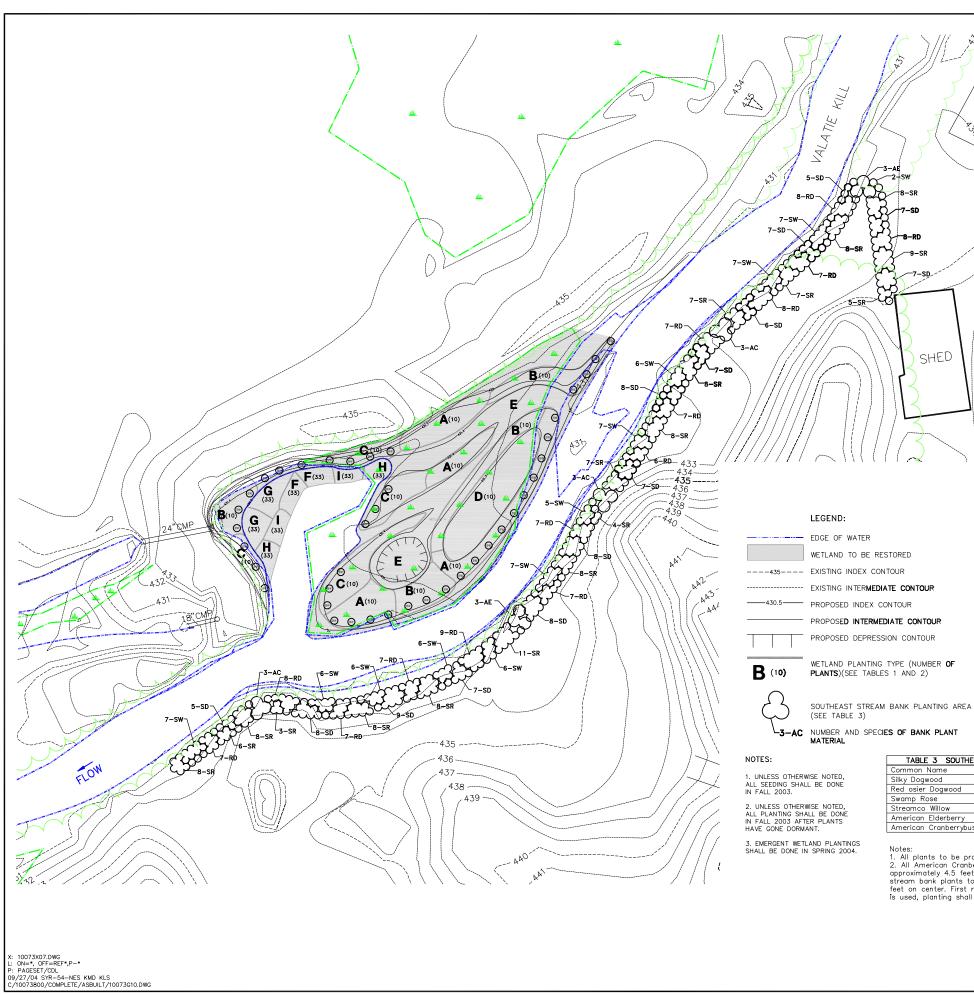












Common Name	<b>Sc</b> ientific Name	X Percent by Number of Seeds		
Green Bulrush	Scirpus atrovirens	28.2		
Soft Rush	Juncus effusus	13.1		
Monkey Flower	Mimulus ringens	12.0		
Fox Sedge	Carex vulpinoidea	8.4		
Ditch Stone Crop	Penthorum sedoides	7.8		
Reed Meadowgrass	Glyceria grandis	6.7		
Wool Grass	Scirpus cyperinus	5.2		
Blue Vervain	Verbena hastata	4.2		
Boneset	Eupatorium perfoliatum	2.1		
Rice Cut Grass	Leersia oryzoides	1.6		
Common Sneezeweed	Helenium autumnale	1.5		
Canada Mannagrass	Glyceria canadensis	1.4		
Joe Pye Weed	Eupatorium maculatum	0.9		
New England Aster	Aster novae-angliae	0.7		
Water Plantain	Alisma plantago-aquatica	0.5		
Grassleaf Goldenrod	Euthamia graminifolia	0.5		
Wrinkled Goldenrod	Solidago rugosa	0.5		
Straw Colored Flatsedge	Cyperus strigosus	0.5		
Purple Stemmed Aster	Aster puniceus	0.4		
Buttonbush	Cephalanthus occidentalis	0.4		
Soft Stem Bulrush	Scirpus tabernaemontanii	0.4		
White Aster	Aster umbellatus	0.3		
Bearded Sedge	Carex comosa	0.3		
Fringed Sedge	Carex crinita	0.3		
Giant Goldenrod	Solidago gigantea	0.2		
Deertongue	Panicum clandestinum	0.2		
Nodding Beggar-Ticks	Bidens cernua	0.2		
Water Parsnip	Sium suave	0.2		
Small Fruited Bulrush	Scirpus microcarpus	0.2		
Water Hemlock	Cicuta maculata	0.2		
Wild Rye	Elymus canadensis	0.2		
Devil's Beggar-Ticks	Bidens frondosa			
Purple-Stem Angelica	Angelica atropurpurea			
Water Dock	Rumex verticillatus			
Shallow sedge	Carex Iurida	0.1		
Pennsylvania Smartweed	Polygonum pennsylvanicum	· · ·		
Swamp Milkweed	Asclepias incarnata			
Riverbank Wild Rve	Elymus riparius			
Hop Sedge	Carex Iupulina			
Blue Flag	Iris versicolor			

Notes:

1. Similar species can be substituted based on seed availability at the approval of the Engineer.

2. Seed should be ordered as soon as possible so supplier can obtain the required quantities in time for seeding.

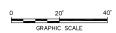
TABLE 2 WETLAND RESTORATION PLANTING SCHEDULE							
Species	Common Name	Plant Type	Size	Symbol	Number to be planted	Spacing	
EMERGENT WETLANDS	•		•	•	•		
Emergent Seeds							
See Table 1		Seed	NA	E	3.2 lbs.	Random	
Emergent Plants							
Sagittaria latifolia	Duck Potato	Bare root	NA	F	66 (33 per location)	Clumps of same species	
Scirpus cyperinus	Wool Grass	or peat		G	66 (33 per location)	at least 2-ft apart, to	
Sparganium americanum	A. Burreed	pot		Н	66 (33 per location)	be planted in spring season.	
Pontederia cordata	Pickerel Weed			1	66 (33 per location)	sedson.	
SHRUB WETLANDS							
Emergent Seeds				All areas		Random throughout	
See Table 1		Seed	NA	below	1.6 lbs.	shrub wetland	
Shrubs:							
Cornus sericea	Red-Osier Dogwood	Container	24"- 36"	A	40 (10 per location)	Random clumps of same species at	
Viburnum recognitum	Northern Arrowwood			В	40 (10 per location)	least 5-ft apart.	
Spiraea alba	Meadowsweet			С	40 (10 per location)	least 5 it apart.	
Salix nigra	Black Willow	Cuttings	20"- 26"	BW	40		
Saplings:							
Acer rubrum	Red Maple	Container	18"- 48"	D	10		

TABLE 3 SOUTHEAST STREAM BANK PLANTING SCHEDULE								
Common Name	Scientific Name	Symbol	Size	Quantity				
Silky Dogwood	Cornus amomum	SD	3-4'	99				
Red osier Dogwood	Cornus sericea	RD	3-4'	103				
Swamp Rose	Rosa palustris	SR	3-4'	131				
Streamco Willow	Salix purpurea	SW	3-4'	72				
American Elderberry	Sambucus canadensis	AE	3-4'	6				
American Cranberrybush	Viburnum trilobum	AC	3-4'	9				

Notes:

1. All plants to be provided in 1—3 gallon containers.

2. All American Cranberrybush and American Elderberry to be planted approximately 4.5 feet on center as shown on plan. All other southeast stream bank plants to be planted in 3 staggered rows at approximately 3 feet on center. First row to be at top of bank. Where erosion control mat is used, planting shall be through the matting.

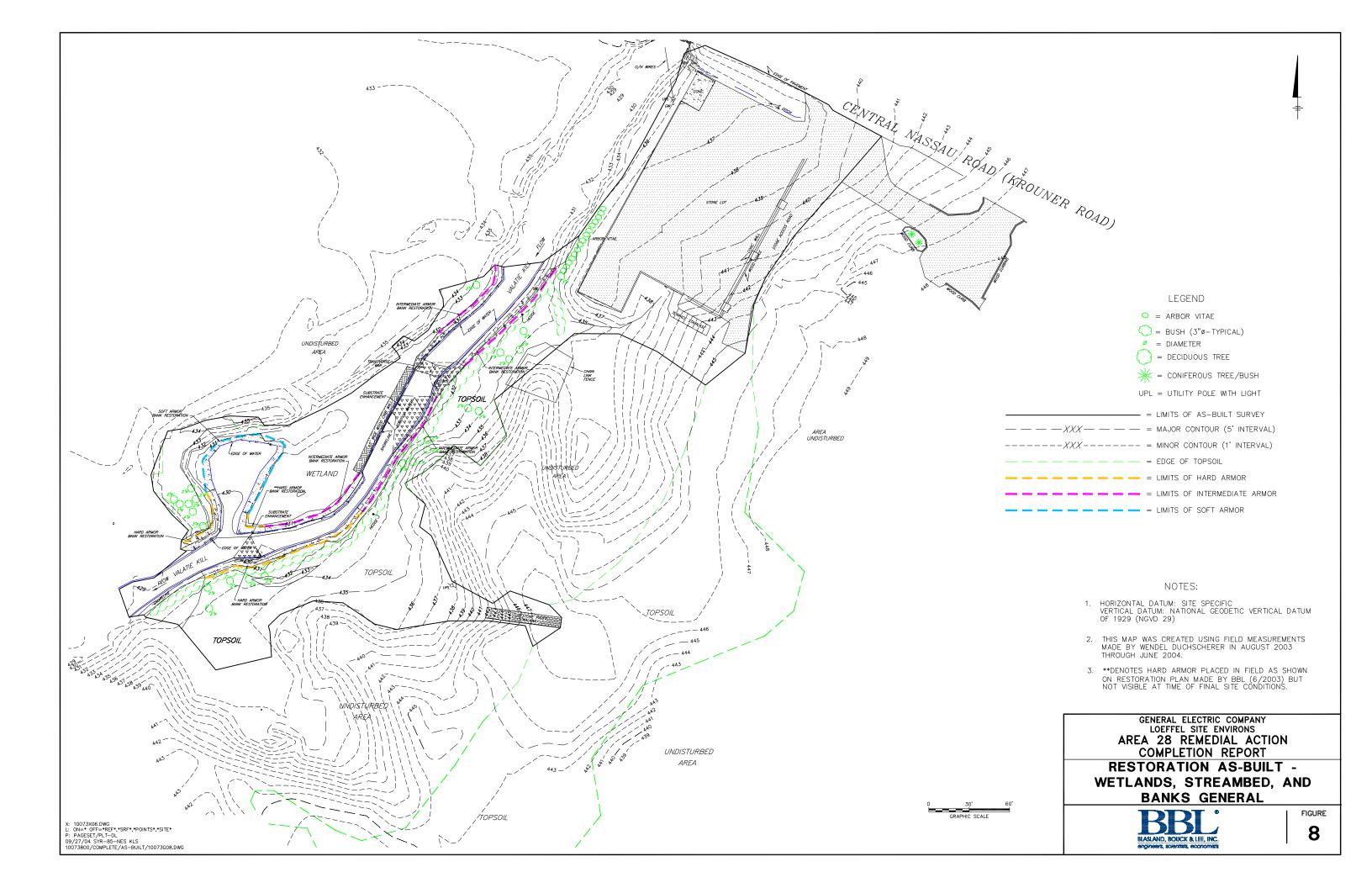


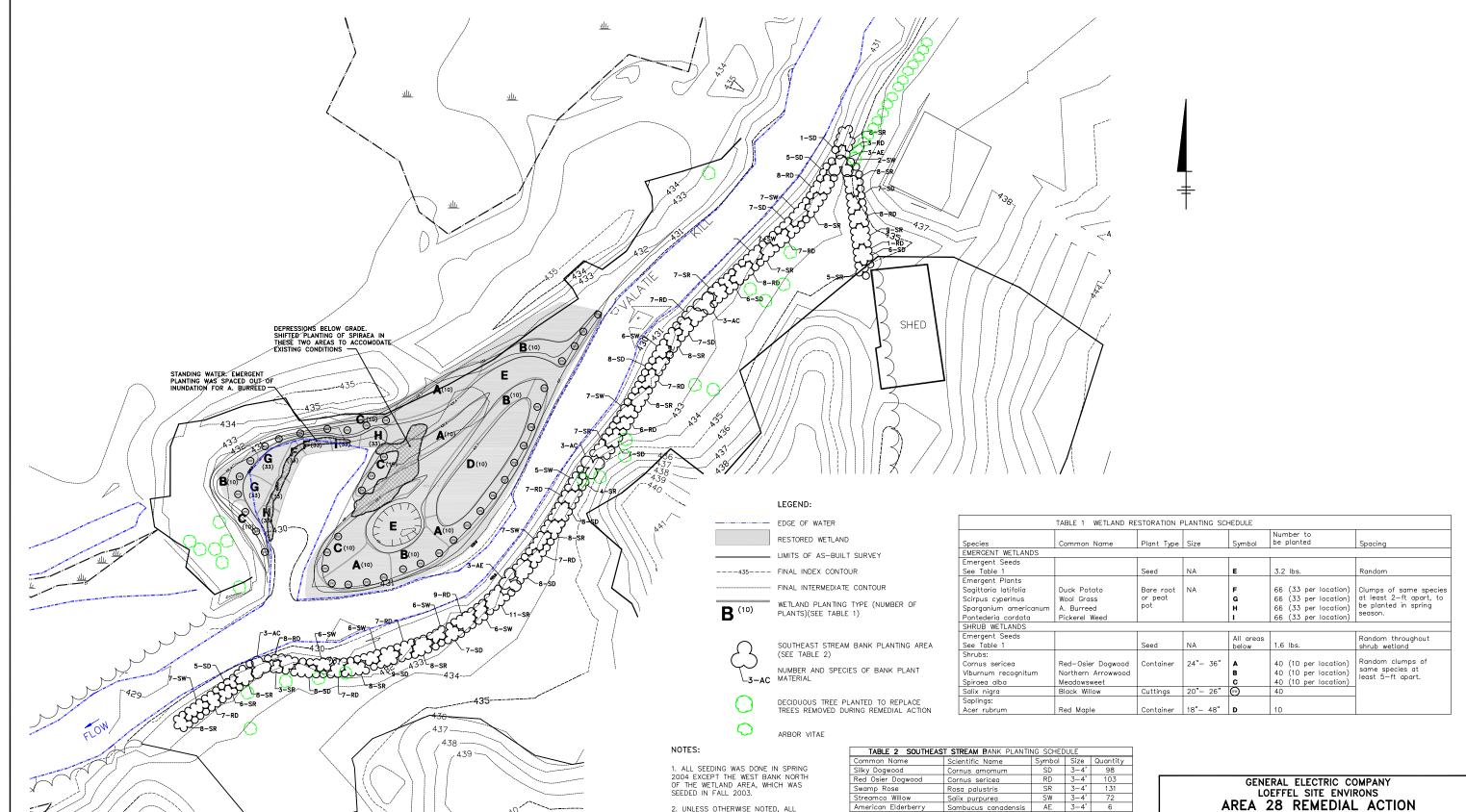
GENERAL ELECTRIC COMPANY LOEFFEL SITE ENVIRONS AREA 18 REMEDIAL ACTION **COMPLETION REPORT** 

#### PLANTING PLAN - WETLANDS AND PORTION OF STREAM BANK



FIGURE





2. UNLESS OTHERWISE NOTED, ALL PLANTING WAS DONE IN SPRING 2004

WHILE PLANTS WERE STILL DORMANT. 3. EMERGENT WETLAND PLANTINGS WAS

X: 10073X08.DWG L: ON=\* OFF=\*REF\*, \*TXT-30 P: PAGESET/PLT-DL 09/27/04 SYR-85-LAF NES KLS C/10073800/COMPLETE/ASBUILT/10073G09.DWG

American Elderberry

American Cranberrybush Viburnum trilobum

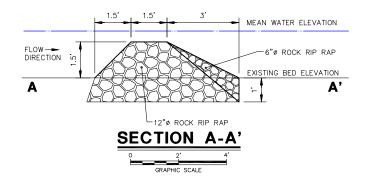
GRAPHIC SCALE

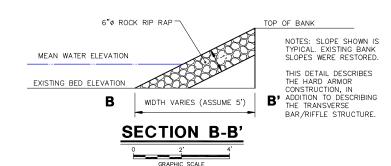
AREA 28 REMEDIAL ACTION **COMPLETION REPORT** 

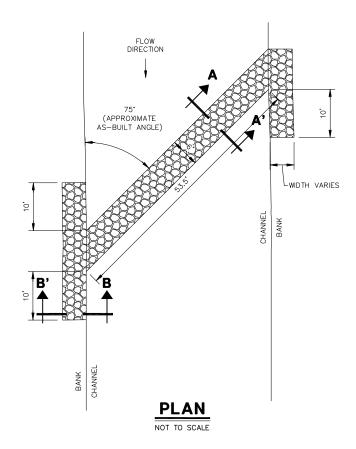
PLANTING AS-BUILT - WETLANDS AND PORTION OF STREAM BANK



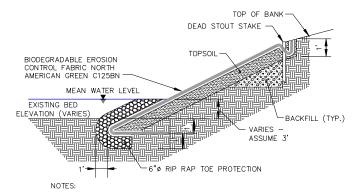
**FIGURE** 







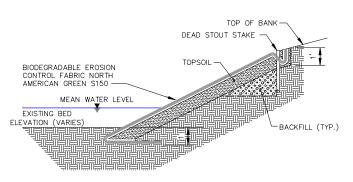
#### TRANSVERSE BAR/RIFFLE DETAIL



- 1. APPLICATION LOCATIONS PRESENTED ON FIGURE 6.
- 2. CROSS-SECTION GRADE DEPICTED IS TYPICAL,

# INTERMEDIATE ARMOR TYPICAL BANK CROSS-SECTION

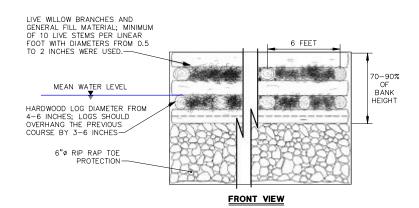
NOT TO SCALE

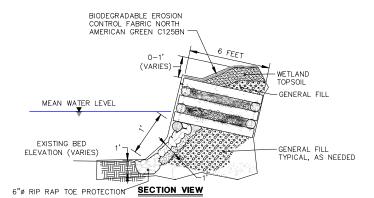


- NOTES:
- 1. APPLICATION LOCATIONS PRESENTED ON FIGURE 6.
- 2. CROSS-SECTION GRADE DEPICTED IS TYPICAL,

# SOFT ARMOR TYPICAL BANK CROSS-SECTION

NOT TO SCALE





#### **CRIB WALL DESIGN SPECIFICATION**

NOT TO SCALE

GENERAL ELECTRIC COMPANY
LOEFFEL SITE ENVIRONS
AREA 28 REMEDIAL ACTION
COMPLETION REPORT

BANK ARMOR, CRIB WALL, AND TRANSVERSE BAR/RIFFLE AS-BUILT DETAILS



Ľ

FIGURE

10

## Appendix A

## **Project Correspondence**



New York State Department of Environmental Conservation

Division of Environmental Remediation Bureau of Central Remedial Action, 12th Floor 625 Broadway, Albany, New York, 12233-7016

Phone: (518) 402-9768 • FAX: (518) 402-9020

Website: www.dec.state.ny.us

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CE CONTINUE ....

Mr. Edward K. LaPoint, P.E. General Electric Company GE Corporate Environmental Programs 320 Great Oaks Office Park, Suite 323 Albany, NY 12203

Dear Mr. LaPoint:

Re: Comments to GE Area 28 Remedial Action Work Plan July 2002 Loeffel Site Environs (Site ID #442006)

The State has completed review of the above-referenced document. Overall, the State agrees with the general approach presented in the work plan, however, clarification and/or modification is needed to address the following:

- Page 3, Work Plan, Area 28-Description. A new paragraph reflecting the presence
  of beavers and dam in Area 28 is needed. Protocol to remove/relocate the beavers
  is required. Figure 2 needs revision to reflect impounded water.
- Page 4, Work Plan, Description of work activities. As previously discussed, the State will require post-construction confirmation sampling an Area 28. The confirmation sampling effort should follow the established protocol used for the T11A remedial action. Samples will be collected by State representatives in the presence of GE's contractor. Samples shall be analyzed by an approved laboratory with deliverables to the State at GE's expense. Removal areas that are restored and/or enhanced prior to confirmation of the removal adequacy will be done at GE's risk subject to further removal efforts if appropriate. Sediment removal in Area 28 should be targeted toward! ppm post-excavation PCB concentration. Removal efforts shall continue until confirmation samples are complaint.
- Page 6, Work Plan, Air monitoring. Realtime air monitoring is required.
- Page 6. Work Plan, Site Restoration. GE will, in the RFP, require the contractor(s) to provide guarantee for the long-term quality of the work.

Specifically, but not limited to erosion of the stream bed including any stabilized areas and quality of vegetative growth.

- Page 7. Work Plan, RA Completion Report. A NYS Professional Engineer must certify that all construction was performed in accordance with the ROD (January 2001) and the plans and specifications.
- Page 4-2, Construction Quality Assurance Plan, 4.1.3 Topsoil, last paragraph.
   Delete "unless otherwise approved by GE."
- Page 6-1, Health and Safety Plan, 6. Air Monitoring, 6.1 Air Monitoring, 6.2 Community Air Monitoring Program general. The DEC TAGM 4031 and the DOH generic Community Air Monitoring Plan (CAMP) are appropriately referenced, however, Table 8 and some statements in the text are inconsistent with the requirements of these documents. Specifically, monitoring for particulates must be continuous during intrusive activities. The text and the table indicate hourly. Also action levels and action to be taken in the event of an exceedence are not correct. Since the HASP submitted by the contractor will be the primary guidance during site operations, these inconsistencies should be noted and changes made in that document.
- As discussed and employed for the T11A remedial program, whole water stream quality monitoring up and down gradient of the Area 28 is required.

Should you have any questions regarding the above comments, please contact me at 402-9774.

Sincerely,

James N. Ludlam, P.E.

Project Manager

Bureau of Central Remedial Action Division of Environmental Remediation



Transmitted Via Federal Express

January 9, 2003

Mr. James N. Ludlam, P.E. New York State Department of Environmental Conservation 625 Broadway, 12<sup>th</sup> Floor Albany, New York 12233-7016

Re: Area 28 Remedial Action Work Plan and Proposed Schedule Response to NYSDEC Comments of November 20, 2002 Loeffel Site Environs

Dear Mr. Ludlam:

'As we discussed during our meeting on January 2, 2003, Blasland, Bouck & Lee, Inc. is submitting this letter on behalf of the General Electric Company (GE) in response to the New York State Department of Environmental Conservation's (NYSDEC's) Area 28 comment letter. This response letter is intended to:

 amend the Area 28 Remedial Action Work Plan (RAWP) by addressing the NYSDEC's comments and providing a proposed schedule for implementation (Attachment A).

Regarding the NYSDEC's comments, GE is offering the following responses:

#### Comment 1

Page 3, Work Plan, Area 28 – Description. A new paragraph reflecting the presence of beavers and dam in Area 28 is needed. Protocol to remove'relocate the beavers is required. Figure 2 needs revision to reflect the impounded water.

> James N. Ludlam January 9, 2003

Page 2 of 5

Response 1

GE will obtain a surveyed elevation of the impounded water level for future use. Since the water levels in

Area 28 will be returned to pre-dam conditions (i.e., those levels currently shown on Figure 2), no

revisions to that figure are needed.

GE will discuss options with adjacent landowner(s) to remove the existing beaver dam. These activities

will be conducted commensurate with applicable NYSDEC regulations.

Comment 2

Page 4, Work Plan, Description of work activities. As previously discussed, the State will require post-

construction confirmatory sampling an [sic] Area 28. The confirmation sampling effort should follow the

established protocol used for the T11A remedial action. Samples will be collected by State

representatives in the presence of GE's contractor. Samples shall be analyzed by an approved laboratory

with deliverables to the State at GE's expense. Removal areas that are restored and or enhanced prior to

confirmation of the removal adequacy will be done at GE's risk subject to further removal efforts if

appropriate. Sediment removal in Area 28 should be targeted toward 1 ppm post-excavation PCB

concentration. Removal efforts shall continue until confirmation samples are compliant.

Response 2

GE will collect, as presented in the Area 28 RAWP, a minimum of 143 predesign samples from 49

locations to determine removal areas. These sample data will result in creation of removal polygons

similar to those used during the Mead Road Pond Interim Remedial Measure (IRM) conducted in 2001.

As discussed during the meeting on January 2, 2003, it was agreed that the post-construction confirmatory

sampling protocol used for the Mead Road Pond IRM will be followed for the Area 28 remedial action.

Comment 3

Page 6, Work Plan, Air Monitoring. Realtime air monitoring is required.

James N. Ludlam

January 9, 2003

Page 3 of 5

Response 3

Air monitoring will be conducted in accordance with NYSDEC's Technical and Administrative Guidance

Memorandum #4031 and New York State Department of Health's Generic Community Air Monitoring

Program. Air monitoring will not be conducted during periods of precipitation.

Comment 4

Page 6, Work Plan, Site Restoration. GE will, in the RFP, require the contractor(s) to provide guarantee

for the long-term quality of the work. Specifically, but not limited to erosion of the stream bed including

any stabilized areas and quality of vegetative growth.

Response 4

GE will require a minimum one year warranty on all work. Warranty for parts of work regulated by the

United States Army Corps of Engineers (USACE) (i.e., wetland and stream bed/banks

mitigation/restoration) will be commensurate with applicable regulations/permits.

Comment 5

Page 6-1, Health and Safety Plan, 6. Air Monitoring, 6.1 Air Monitoring, 6.2 Community Air Monitoring

Program, general. The DEC TAGM 4031 and the DOH generic Community Air Monitoring Plan

(CAMP) are appropriately referenced, however, Table 8 and some statements in the text are inconsistent

with the requirements of these documents. Specifically, monitoring for particulates must be continuous

during intrusive activities. The text and the table indicate hourly. Also action levels and action to be

taken in the event of an exceedance are not correct. Since the HASP submitted by the contractor will be

the primary guidance during site operations, these inconsistencies should be noted and changes made in

that document.

V:\GE\_Loeffel\_Site\_Environs\_Confidential\Correspondence\01931680.doc

James N. Ludlam January 9, 2003

Page 4 of 5

Response 5

GE will include these modifications in the pertinent sections of the Remedial Design Documents.

Comment 6

As discussed and employed for the T11A remedial program, whole water stream quality monitoring up

and down gradient of the Area 28 is required.

Response 6

GE will conduct baseflow and storm event sampling before and after the Area 28 remedial action similar

to the baseflow and storm event sampling conducted and to be conducted in relation to the T11A remedial

action (i.e., per Section 2.2.2 of the July 2002 Long-Term Monitoring Plan). Samples will be collected

immediately upstream and downstream of Area 28. It is anticipated that baseflow sampling will be

conducted in the summers of 2003 and 2004. Storm sampling will target storm events in the springs of

2003 and 2004.

General Comments Regarding Schedule for OU-3 Remedial Actions

GE understands this correspondence and subsequent submittal of the Remedial Design Documents

addresses the need to revise the previously submitted Area 28 RAWP. GE looks forward to working with

the NYSDEC to complete the Area 28 remedy in the fall of 2003.

Sincerely,

BLASLAND, BOUCK & LEE, INC.

Christopher R. Torell Sr. Project Engineer II

CRT/tld

James N. Ludlam January 9, 2003 Page 5 of 5

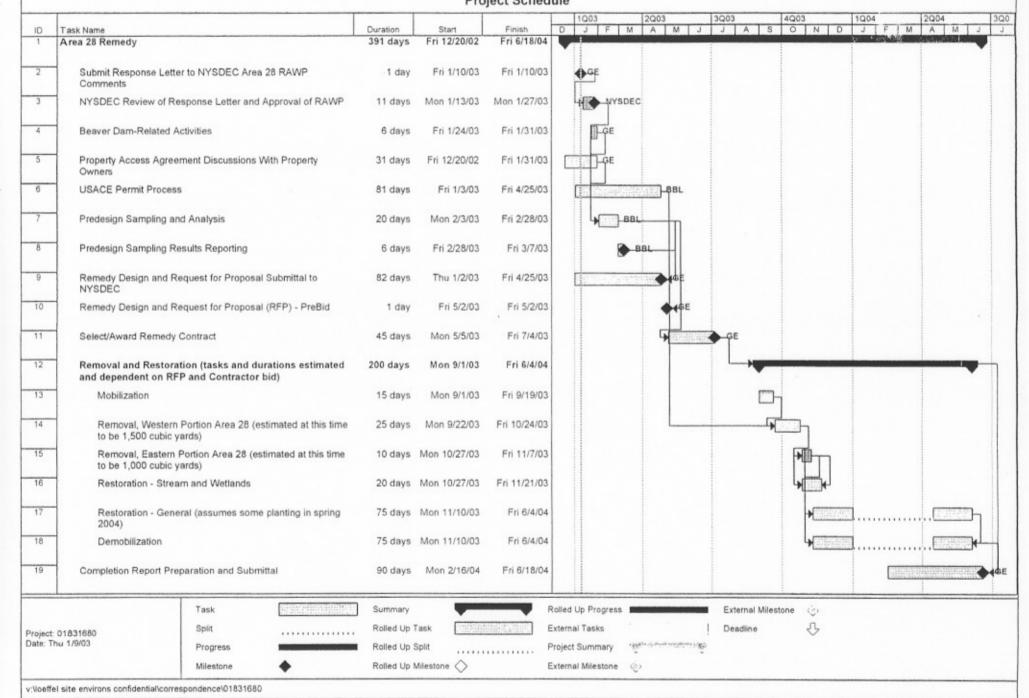
cc: Michael Komoroske, P.E., NYSDEC Kevin Farrar, NYSDEC John Sheehan, NYSDOH Michael S. Elder, Esq., General Electric Company Edward K. LaPoint, P.E., General Electric Company

## Attachment A

BBL

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

# Attachment A General Electric Company Loeffel Site Environs Area 28 Remedial Action Project Schedule



### New York State Department of Environmental Conservation

Division of Environmental Remediation Bureau of Central Remedial Action, 12th Floor

625 Broadway, Albany, New York 12233-7018

Phone: (518) 402-9768 • FAX: (518) 402-9020

Website: www.dec.state.ny.us



February 20, 2003

Post-It Fax Note

Co/Dept.

Phone #

Fax

7671

Phone #

Mr. Edward K. LaPoint, P.E. General Electric Company GE Corporate Environmental Programs 323 Great Oaks Office Park, Suite 323 Albany, NY 12203

> RE: Area 28 Remedial Action Work Plan July 2002, Loeffel Site Environs Site I.D. # 442006

Dear Mr. LaPoint:

The above referenced work plan as amended by the BBL responses to the State (January 9, 2003 and February 18, 2003) is hereby approved.

It is the Department's understanding that GE will coordinate for appropriate State oversight of activities related to the beaver dam, and of predesign sampling activities. It is also the Department's understanding that GE will provide the Department with sufficient opportunity to review the biddable plans and specifications and RFP, and attend the pre-construction meeting with prospective bidders.

The State has reviewed the proposed conceptual access road and staging area location plan for the west side of the Valatic Kill and concurs with the approach. Resolution of the Consent Decree addressing the Area 28 remedial plan is required prior to implementation of the work.

Should you have any questions regarding the above comments, please contact me at 402-9774.

Sincerely,

James N. Ludlam, P.E.

Project Manager

Bureau of Central Remedial Action

Division of Environmental Remediation



#### DEPARTMENT OF THE ARMY

NEW YORK DISTRICT, CORPS OF ENGINEERS
ALBANY FIELD OFFICE
1 BOND STREET
TROY, NEW YORK 12180

APR 3 0 2003

REPLY TO ATTENTION OF:

Regulatory Branch

SUBJECT: Permit Application Number 2003-00261-YN

by General Electric Company

General Electric Company c/o Anthony Esposito Blasland, Bouck & Lee, Inc. 6723 Towpath Road, P.O. Box 66 Syracuse, New York 13214-0066

Dear Mr. Esposito:

On March 17, 2003, the New York District Corps of Engineers received a request for Department of the Army authorization for the discharge of fill material into waters of the United States to facilitate the remediation of a contaminated site which is to be conducted in accordance with the New York State Resource Conservation and Recovery Act (RCRA). The site is located south of Central Nassau Road in the Town of Nassau, Rensselaer County, New York.

The submitted material entitled "Preconstruction Notification-Area 28 Remedial Action, Loeffel Site Environs, Nassau, New York", prepared by Blasland, Bouck & Lee, Inc., dated March 2003, indicates that the work would involve the discharge of fill material into 0.21 acres of wetlands and 300 linear feet of the Valatie Kill to facilitate the removal of contaminated soil and sediment. Temporary water diversion structures would be placed within the stream to facilitate the sediment removal activities. Fill material would be discharged into the entire 300 linear foot section of stream channel to restore it to conditions that maintain the stability of the channel and enhance fish habitat. Cross vanes, triangular deflectors and transverse bars would be constructed in the waterway for this purpose. Additionally, a 0.21 acre emergent and scrub shrub section of Wetland 4 would be restored and 0.01 acre would be created along the west side of Wetland 4 to mitigate for permanent impacts to waters of the United States.

Based on the information submitted to this office, and accomplishment of notification in accordance with the applicable federal requirements, our review of the project indicates that an individual permit is not required. It appears that the activities within the jurisdiction of this office could be accomplished under Department of the Army Nationwide General

Permit Numbers 33 and 38. The nationwide permits are prescribed as an Issuance of Nationwide Permits in the Federal Register dated January 15, 2002 (67 FR 2020). The work may be performed without further authorization from this office provided the activity complies with the permit conditions listed in Section B, Nos. 33 and 38, Section C, any applicable New York District regional conditions, the following special conditions, and any applicable regional conditions added by the State of New York, copies enclosed.

#### Special Conditions

- (A) No later than thirty (30) days prior to the commencement of the work authorized by this permit, the permittee shall provide this office one set of plan and section view drawings illustrating all work assoc: ated with the final sediment removal and restoration plan in reference to the existing waters of the United States at the site. These drawings shall include the sediment removal locations and depths, proposed postremediation contours within the Valatie Kill and Wetland 4, the types and locations of all temporary structures or fill that will be utilized to accomplish the work, including cofferdams, access roads and staging areas, the location of all streambank stabilization and in-stream enhancement structures, and detailed planting plans. In addition, the permittee shall quantify all impacts to waters of the United States in the required drawings. No work shall be performed on the project site until the permittee receives written approval of the plans from this office.
- (B) The permittee shall be responsible for restoring all wetland and stream areas disturbed during the remediation effort. The permittee shall ensure that the created and restored wetland areas meet the federal wetland criteria outlined in the report entitled "Corps of Engineers Wetland Delineation Manual" dated January 1987, with current Corps of Engineers guidance. The stream channel shall be restored and enhanced so that it is stable.
- (C) The permittee shall provide to this office two (2) copies of an annual report on the status of the stream and wetland restoration effort, prepared during the growing season, no later than October 31 in each of the following five (5) years after initiation of the activities authorized by this letter. These reports shall include the following at a minimum:
- i. All plant species, along with their estimated relative frequency and percent cover, shall be identified by using plots measuring 10 feet by 10 feet with at least one representative plot located in each of the habitat types within the wetland restoration/creation site. The location of each plot shall be identified on the plan view engineering drawing.

- ii. Vegetation cover maps in the wetland restoration/creation site, at a scale of one inch equals 100 feet, or larger scale, shall be prepared for each growing season.
- iii. Photographs showing representative areas of the wetland mitigation site shall be taken at least once each year during the period between 1 June and 15 August.
- iv. Two sets of clear, color photographs of the section of the Valatie Kill that will be restored and stabilized, each instream enhancement structure, and the sections of stream channel located immediately upstream and downstream of the project reach. One set of photographs shall be taken during normal flow conditions, and the other shall be taken immediately following an annual or bankfull flow event.
- v. A Level II stream reach classification for the site. Data shall include channel dimensions at bankfull in both riffle and pool sections, a pebble count, and the identified stream type.
- vi. A written description of the existing conditions at the work site, including the conditions of the wetland mitigation area, conditions of the stream bed and banks, in-stream enhancement structures, conditions upstream and downstream from the work area, and any observed usage by fish and wildlife.
- (D) The permittee shall ensure that all plantings in conjunction with the stream and wetland restoration effort shall have an eighty-five (85) percent survival and/or coverage rate which must be met or exceeded at the end of the second growing season following the initial planting/seeding of the site. If the eighty-five (85) percent survival rate is not met at the end of the second growing season, the permittee shall take all necessary measures to ensure the level of survival by the end of the next growing season, including re-planting and re-grading if necessary.
- (E) The permittee shall undertake the authorized filling activities in a manner aimed at reducing impacts upon the general environment. In addition, the permittee shall not stockpile fill or other materials in a manner conducive to erosion, or in areas likely to cause high turbidity runoff during storm events. All exposed soils shall be re-vegetated in a timely manner to further reduce potential effects. The permittee shall also fence off all wetlands and other sensitive ecological areas during construction periods to prevent equipment and personnel from entering these areas.

PAGE 05

- (F) If corrective measures are determined to be necessary to ensure the stability of the stream reach, or the successful restoration/creation of the wetland area, the permittee shall notify this office at least 30 days prior to undertaking such work and shall not proceed until approved in writing by the New York District.
- (G) The permittee shall assume all liability for accomplishing the corrective work should the New York District determine that the mitigation has not been fully satisfactory. If the New York District does not find the mitigation satisfactory, an extension of monitoring time may be required to cover any necessary remedial work.
- (H) The permittee shall preserve the wetland and stream restoration areas in perpetuity to guarantee their preservation for wetland and wildlife resources.

This determination covers only the work described in the submitted material. Any major changes in the project may require additional authorizations from the New York District.

Care should be taken so that construction materials, including debris, do not enter any waterway to become drift or pollution hazards. You are to contact the appropriate state and local government officials to ensure that the subject work is performed in compliance with their requirements.

This verification is valid for a period of two years from the date of this letter, unless the nationwide permit is modified, suspended or revoked. This verification will remain valid for two years from the date of this letter if the activity complies with the terms of any subsequent modifications of the nationwide permit authorization. If the nationwide permits are suspended, revoked, or modified in such a way that the activity would no longer comply with the terms and conditions of a nationwide permit, and the proposed activity has commenced, or is under contract to commence, the permittee shall have 12 months from the date of such action to complete the activity.

Within 30 days of the completion of the activity authorized by this permit and any mitigation required by this permit, you are to sign and submit the attached compliance certification form to this office. If any questions should arise concerning this matter, please contact Andrew Dangler, of my staff, at (518) 270-0588.

Sincerely,

O George Nieves

Chief, Western Permits Section

Enclosures

cf: NYSDEC - Region 4 Town of Nassau

James Ludlam, NYSDEC central Office



#### GE Corporate Environmental Programs

#### HAZARDOUS MATERIALS TRANSPORTATION SECURITY PLAN AREA 28 REMEDIAL ACTION SITE

Prepared by:

Edward K. LaPoint, P.E. Project Manager

Reviewed and Approved by:

Project Manager

GE Corporate Environmental Programs

October 1, 2003

#### HAZARDOUS MATERIALS TRANSPORTATION SECURITY PLAN GE CORPORATE ENVIRONMENTAL PROGRAMS – AREA 28 REMEDIAL ACTION SITE

#### 1.0 Introduction

This Hazardous Materials Transportation Security Plan (HMTSP) has been prepared for the Area 28 Remedial Action (RA) Site in Nassau, New York (the Site). The General Electric Company's (GE's) Corporate Environmental Programs (CEP) developed this HMTSP to document the procedures implemented for the security of hazardous materials being staged at and then transported from the Site. The objective of this HMTSP is to provide security procedures to minimize transportation security risks for materials being shipped from the Site.

Specifically, this HMTSP includes Site information, describes the security measures for hazardous materials shipped from the Site, and identifies training requirements.

GE CEP has developed these procedures specifically for the RA at the Site, where the types and quantities of hazardous materials managed and transported will be generated over a relatively short duration and only as a result of the RA program. This Site is occupied by workers engaged in environmental remediation activities during normal work hours. Additionally, the caretaker of the property lives adjacent to the Site, a GE representative (Edward K. LaPoint – GE CEP Project Manager) visits the Site frequently, and the New York State Department of Environmental Conservation (NYSDEC) provides daily oversight.

This HMTSP is consistent with GE's HazMat Security Plan Guidelines (Appendix A) and GE's Security and Crisis Management Policy (Appendix B), and meets the security plan requirements for the transportation of hazardous materials established by the U.S. Department of Transportation (DOT) at 49 CFR Part 172, Subpart I, §172.800 and §172.802.

#### 2.0 Site Information

#### 2.1 Site Location and Description

The Area 28 RA Site, a specific portion of the Valatie Kill, is located in the Loeffel Site Environs Operable Unit-3 (OU-3) in Nassau, New York and extends from Central Nassau Road along the Valatie Kill for approximately 500 feet. Deposited materials containing polychlorinated biphenyls (PCBs) in the Site originated from upstream areas, which have since been remediated. GE and the NYSDEC have entered into a Second Stipulation and Order of Partial Settlement (SS) to facilitate the RA. The SS requires removal of soil and sediment at the Site that contain PCBs.

#### 2.2 Summary of RA Program

The RA is being conducted at the Site under the SS to address soil and sediment containing PCBs in the project area. Remedial activities being conducted consist of excavation of impacted soil and sediment and transport of same via tractor trailers to GE-approved offsite disposal facilities.

#### 2.3 Description of Hazardous Materials Transported from the Site

Remedial activities conducted at the Site result in the generation of hazardous materials that require placards for transporting and shipping of those materials from the Site under 49 CFR Part 172, Subpart F Placarding. This condition requires that this HMTSP be prepared to address potential transportation security risks. The hazardous materials generated/managed at the Site requiring placards for transportation consist of soils and sediments containing PCBs at concentrations ranging between 50 and 120 milligrams per kilogram, which are also subject to regulations under the Toxic Substances Control Act.

#### 3.0 Security Measures for Hazardous Materials

#### 3.1 General Risk Assessment

The potential security risks represented by the transportation of hazardous materials generated and managed at the Site are low; there are minimal risks to trespassers, and the materials generated contain relatively low levels of hazardous constituents. Hazardous materials stored at the Site are planned for shipment to a GE-approved disposal facility. These hazardous materials do not contain sufficient quantities of any material that would be considered a target for terrorist or other covert activity (not a regulated toxin/agent, radioactive, poisonous, or flammable/explosive). Additionally, the materials, being sediments and soils would be difficult to transport in any significant quantity without specialized equipment (e.g., backhoe, dump truck, etc.). Therefore, the greatest concern regarding the storage and transportation of these materials is potential vandalism related to breaches of Site security and accidents resulting in releases during on and offsite transportation. Provisions to minimize unauthorized access to the Site are described in Section 3.3, below.

As part of typical Site operations, a daily inventory of hazardous materials stored onsite and transported offsite is performed. Any shortages or discrepancies that are identified will be immediately investigated and/or reconciled. Documentation of the material inventories, reconciliations and discrepancy resolutions is maintained at the Site and at the CEP Project Manager's office or the Site Engineer's office.

#### 3.2 Personnel Security

All GE CEP employees are subject to background checks before being offered employment with the Company. Therefore, no additional security measures are proposed for GE CEP employees who may have access to (or, on limited occasions, potentially be required to handle) hazardous materials managed at the Site. Additional security screening measures that may be applied are presented in **Attachment B: HazMat Personnel Screening** of GE's Security Plan Guidelines, which is attached to this HMTSP as Appendix A.

Most activities implemented at the Site pertaining to hazardous materials management are conducted by contractors, consultants, and transportation companies that are carefully screened, evaluated, and selected by GE CEP. Screening of non-GE CEP personnel is a responsibility of individual consultants, contractors, and transporters that are required under federal employment law to verify employee identification (e.g., name, social security number, citizenship, etc.) at the time of employment. Furthermore, these contractors, consultants, and transporters enter into contractual agreements with GE CEP that include conditions related to assignment of qualified personnel and meeting all regulatory requirements as they pertain to the activities conducted under the contract. These activities may include the signing of hazardous materials shipping papers and acting as GE's representative when hazardous materials are loaded for shipment and disposal. Consequently, the contractors, consultants, and transporters have procedures in place to verify the experience and qualifications of their respective employees. Based on the low risk represented by the hazardous materials that may be present at the Site, additional background screening of contractor and consultant personnel will not be conducted by GE. However, background screening of employees and maintaining records of employee training are the responsibility of the consultant, contractor, or transporter.

All contractors, consultants, and transporters involved with the transportation of hazardous materials from the Site will be provided with specific training regarding this HMTSP. GE CEP will maintain records of contractor and consultant training in the project files for the Site. Security training requirements are discussed further in Section 4.0 of this HMTSP.

#### 3.3 Unauthorized Access

Access to the Site is controlled by personnel presence and signage ("Do Not Enter") during work hours and by the property caretaker's residence adjacent to the Site during non-work hours. All onsite facilities (e.g., trailers, machinery, etc.) are locked when not in use and after work hours. All hazardous materials that may be present at the Site are staged in a remote area, purposely located away from the Site perimeter and difficult to view from the Site boundaries. These materials are present at the Site for only limited periods of time, and, as stated above, require specialized equipment to move in significant quantities. Only authorized employees are permitted access to the Site and the locations where the hazardous materials are stored. GE CEP representatives, contractors,

and consultants are required to follow the sign-in/sign-out procedures established for the Site to control access.

A Security Self Assessment evaluation addressing security and crisis management provisions has previously been completed for the Site using the GE CEP Crisis Management-Risk Vulnerability Assessment Tool (CM-RVAT). In addition, a Crisis Communication Worksheet has also been completed for the Site. Site security was also analyzed using a Failure Modes and Effects Analysis (FMEA) regarding remedial components operations and potential impacts to those components related to potential breaches of site security. These evaluations are included in Appendix B of this HMTSP and describe the measures in place at the Site to restrict unauthorized access and provide for security of hazardous materials being stored/staged prior to transportation from the Site.

The Site Security and Crisis Management Plan includes a schedule for the frequency of inspections and procedures for documenting that the security measures in place remain valid for the Site conditions and are intact. The frequency of inspections may be adjusted in response to changing conditions at the Site. Guidelines for the security inspections are included in **Attachment C: Security Inspections** of GE's HazMat Security Plan Guidelines (Appendix A).

Any suspicious activity or breaches of Site security discovered while present at the Site must be reported immediately to the GE CEP Project Manager (Edward K. LaPoint). GE CEP's Project Manager will then determine whether additional communication of the identified condition is required and make the additional contacts per the Crisis Communication Plan/Worksheet for the Site and the Security and Crisis Management Policy.

GE CEP will arrange to provide access to the Site for all waste transporters (and other vendors) making pick-ups. While present at the Site, the waste transporter's representative will be escorted to all areas where hazardous materials are staged.

#### 3.4 En-Route Security for Transportation of Hazardous Wastes

Only GE CEP-approved transporters will be used to ship hazardous wastes or PCBs wastes. A list of these approved transporters can be found on the GE CEP Home Page under GE Approved Hazardous Waste and PCB Transporters. GE CEP will ensure that any approved motor carrier used to transport hazardous materials is qualified and has met the appropriate DOT security requirements. The documentation verifying that each transporter meets these requirements is presented in Appendix C. Additional requirements for transporters and transportation of hazardous waste that must be met by any transporter are included in Attachment E: En Route Security for Motor Carriers, which is attached to this HMTSP in Appendix A.

#### 4.0 Training Requirements

All GE CEP hazmat employees, including GE CEP representatives, contractors, consultants, and transporters, are required under current GE policy to meet certain security training requirements. These include general security awareness training and security training related to the transportation of hazardous materials from this Site. The training will help ensure that Site personnel understand their roles and obligations in confirming the safe transportation of hazardous materials from the Site.

GE requires that the general security training be completed and certified through testing at least once every 3 years; initial training must be completed with 90 days of employment for new employees. GE requires that its training certifications be retained in the project file by GE CEP for all personnel involved with transportation security for hazardous materials at the Site. The initial in-depth security training specifically required for this Site must be completed by December 22, 2003. In-depth training for transporters used for this Site will be verified by on-site GE CEP representatives at the time the shipment is loaded for transportation. Specifically, the following training will be verified:

- · Overall security objectives;
- Site-specific security procedures and organizational structure;
- · Individual security responsibility, including recognizing suspicious activity; and
- · Response to security breaches.

GE CEP and the contractor, consultant, or transporter will verify that the necessary training is completed and will retain training records related to same in the project file. A copy of a sign-off sheet confirming that the in-depth training was verified is included as Appendix D and will be signed by all personnel undergoing the site-specific security training. Copies of the HMTSP will be provided to key personnel as necessary.

### 5.0 Security Plan Revisions and Modifications

The HMTSP will be updated and revised as necessary to reflect any changes in Site conditions or changed circumstances that may impact the security of hazardous materials and/or hazardous materials transportation. Modified, updated versions of the HMTSP will include the date of the most recent revision and indicate the revision number. The revised HMTSP will be placed in the project files and distributed to personnel involved with hazardous materials transportation at the Site, with previous versions being removed from the files and discarded.

# APPENDIX A

GE Security and Crisis Management Guidelines (Revised Draft-9/24/2003)

# GE HazMat<sup>1</sup> Security Plan Guidelines

#### GENERAL GUIDELINES

GE facilities handling such amounts of HazMats as to require placards<sup>2</sup>, shall prepare and maintain a written HazMat Security Plan, and shall meet all the requirements as outlined in the GE Site Security and Crisis Management Policy. These HazMat Security Plans must address the following areas:

- 1. HazMat risk assessment;
- 2. Personnel security;
- 3. Unauthorized access; and
- 4. En route security (for transport of HazMats).

Please note that these guidelines were written to help you comply with federal DOT security requirements; states may have more stringent requirements with which you also must comply.

All HazMat employees should sign and date the receipt of the Hazardous Materials Transportation Security Plan and records should be kept that the HazMat employees have been trained in pertinent provisions of the Plan. An example sign-off sheet is provided at the end of this section.

#### HazMat RISK ASSESSMENT

Each plan shall include a written risk assessment that addresses possible transportation security risks for shipment of HazMats and hazardous wastes and appropriate measures to address the assessed risks.

#### PERSONNEL SECURITY

Personnel involved with HazMats transportation procedures must be trained, tested, and certified to demonstrate that they are familiar with facility security plans and procedures. This training must be conducted at least every 2 years. Copies of the training tools, test results, and employee training records must be kept until superceded by new training.

Employees are expected to report suspicious activities to their immediate supervisor, manger, business security leader, or local law enforcement officials. For examples of

<sup>&</sup>lt;sup>1</sup> In this document, the term "HazMat" refers to both hazardous materials and hazardous wastes.

<sup>&</sup>lt;sup>2</sup> Placardable amounts include any bulk packages as well as non-bulk shipments w/total gross weight equal to or greater than 1001 lb/load; or smaller amounts of extremely dangerous HazMats such as radioactives, explosives, inhalation poisons, etc. Even if a GE site does not ship extremely hazardous materials, the threshold is low: 2 or 3, 55-gallons drums of HazMats/load or one cubic yard of soil contaminated with hazardous waste may trigger the requirement for a written security plan and in-depth security training.

suspicious activities, please see Attachment A. Employees are also encouraged to use web-based reporting tools, if hosted by their individual business elements.

All employees, contractors and other persons involved in the handling, storage, preparing for transport and/or transportation of HazMat are considered to be in Security Sensitive Positions, subject to the GE Corp HR Background Screening Requirements. Additionally, there are personnel screening requirements for HazMat drivers and positions involving access to handling, storing, preparing for transport, and/or transport of HazMats, which are provided in Attachment B.

#### UNAUTHORIZED ACCESS

Each business shall establish and implement procedures for ensuring only authorized personnel can access sites where HazMats are stored or prepared for shipment. Procedures shall ensure that all waste vendors, chemical suppliers, and other vendors making deliveries and pick-ups on site are properly screened, cleared with adequate background checks, and provided badges according to business requirements. At no time shall any unauthorized vendor or supplier be left unaccompanied in a HazMat controlled area.

Each business shall establish and implement procedures for security inspections for areas where HazMats are packaged for shipment. (See Attachment C.)

Each business shall restrict information (both electronic and paper) pertaining to the storage and/or transportation of HazMat to only those GE employees and contractors having a need-to-know. (See Attachment D.)

#### EN ROUTE SECURITY

Each business that uses outside HazMat carriers shall ensure:

- Only GE CEP approved transporters are used to ship hazardous wastes or PCBs wastes. A list of these approved transporters can be found on the CEP Home Page under GE Approved Hazardous Waste and PCB Transporters.
- Any motor carrier used to transport HazMats is qualified and has met DOT security requirements. (See Attachment E: En Route Security for Motor Carriers for additional information on how to qualify these transporters.)

Each GE business that owns, operates and/or leases vehicles used to carry HazMats shall develop and implement measures that adequately resolve all security-related vulnerabilities to HazMat shipments from origin to destination, including permanent and temporary storage incidental to transportation. (See Attachment F.)

### Employee Sign-off Sheet

I acknowledge I have been informed and given a copy of the company's Hazardous Materials Transportation Security Plan. I have read and understand the procedures contained therein, and I accept the policy as a working document that I will support and follow in my daily work.

Employee's Signature:	Date:	
Supervisor or Safety Director's Signature:	Date:	

# Attachment A: Examples of Suspicious Activity

# Suspicious activity includes, but is not limited to, any of the following situations:

- Unidentified person(s) attempting to gain access to property, equipment, or facilities.
- Unidentified person(s) in any area of the company, office, yard, or parking lot.
- Any person (employee or otherwise) found visiting a part an office, plant, facility, or site for unknown or suspicious reasons.
- Any person (employee or otherwise) found wondering on GE property.
- Any person (employee or otherwise) who appears to be hiding something or is acting nervous, anxious, or secretive.
- Any employee or visitor making unusual or repeated requests for sensitive or important company documents or information.
- Any person asking an employee to make any unauthorized movement (pick-up and delivery) for cash (motor carrier specific).
- · Any person or group loitering outside a company facility or premises.
- Any person claiming to be a representative of a utility (gas, water, electric) but cannot produce valid company identification.
- Uniformed delivery personnel using a private vehicle, or carrying suspicious company credentials
- Any person observed carrying a weapon such as a gun or knife.
- During hours of darkness, any vehicle driving slowly by a company facility with the headlights off.
- Any occupied vehicle parked outside a company facility, especially if the vehicle
  has been sitting for a long period or after normal work hours.
- An vehicle that appears to be abandoned, and is parked near a company building, parking lot or adjacent to GE property.

### Attachment B: HazMat Personnel Screening

All GE employees (and future applicants) holding positions that require access to, or the handling, packaging, storage or transportation of, HazMats must meet the same minimal background screening and safety criteria imposed upon HazMat contractors by and in accordance with GE CEP standards. Criminal background checks for all current GE HazMat handlers may be waived at the discretion of the respective business component.

To comply with personnel screening requirements, those GE facilities handling placardable amounts of HazMats shall produce a Consolidated HazMat Handlers Clearance Roster. This roster must contain the names, positions, and telephone numbers of all persons (employees or otherwise) cleared and authorized to handle HazMats at that respective location. The following statement will be reflected at the top of the page containing the roster, "The below listed individuals are authorized to handle hazardous materials on GE property." Where applicable, this roster shall be provided to the onsite security staff and/or EHS leader for informational purposes and policy enforcement, and shall be immediately updated whenever HazMat handlers are added or removed from the roster.

The application requirements for HazMat handlers are synopsized, below:

#### For All GE HazMat Personnel:

- Meet the general minimum age and experience requirements as set forth by the GE business component.
- Be subject to an inquiry into their driving record during the preceding 3 years (10 years for CDLs). The inquiry is made to the appropriate agency of every state in which the applicant held a motor vehicle operator's license or permit. The driver qualification and hiring process does not continue until all driving record information for the preceding 3 years (10 years for CDLs) has been verified as true and accurate.
- Be subject to an investigation into the employment record during the preceding 3 years (10 years for CDLs). Driver applicants must provide accurate and complete previous and current employer information upon request, including but not limited to: names and addresses of previous employers; names and titles of previous supervisors and dispatchers; phone numbers or other contact information for both of the above. The driver qualification and hiring process does not continue until all previous employer information for the preceding 3 years (10 years CDLs) has been verified as true and accurate.
- Undergo an investigation into their drug and alcohol history with regard to
  previous employers per 49 CFR §40.25. The driver qualification and hiring
  process does not continue until drug and alcohol information from previous
  employers for the preceding 2 years has been obtained and verified.
- Conduct an in-person interview with the applicant, which is used to determine fit
  for both the applicant and the company. In addition, the in-person interview is
  used to identify and/or resolve any unexplained gap(s) in employment history,

- reason(s) for job or career changes, and other areas of concern regarding the applicant's background or work-related capabilities.
- Submit to a pre-employment drug screen as required by 49 CFR §382.301 (for drivers requiring a CDL); no driver applicant performs any work or activity until a verified negative test result has been obtained for the applicant.
- Be medically examined and certified as physically qualified to operate a commercial motor vehicle by a licensed medical examiner of our choosing.
- Undergo at a minimum and previous to any potential employment, a single-county, seven-year history, upper and lower court criminal record check based upon the address of current residence. Should an applicant have resided elsewhere (two or more locations) within a one-year period just prior to applying for a HazMat position, each previous residence (and respective county) should be checked for criminal history. The same procedure applies for state checks, where applicable. Federal criminal record checks are to be conducted when required and/or authorized by Federal law and where legally permitted.

#### Additional Requirements For GE HazMat Drivers:

All GE personnel or GE contracted personnel assigned to transport hazardous materials or hazardous waste in commercial vehicles on public highways must be properly qualified per 49 CFR Part 391. Additional GE business hiring requirements may also be applicable. Contact Manager - GE DOT Compliance Programs, GE Transportation Management Services, 13391 McGregor Blvd, Fort Myers, FL 33919, phone: 239-985-3016 for Driver Qualification.

### Attachment C: Security Inspections

Security inspections shall be conducted for all placardable amounts of HazMats handled during shipping and receiving activities. Inspection frequency shall be determined by each business component.

To comply with security inspection requirements, those GE facilities handling placardable amounts of HazMats shall produce a HazMat Security Inspection Checklist. This checklist shall contain inspection details such as the dates, times, specific locations, names of persons inspecting, comments, and identification numbers of respective vehicles, trailers, railcars, etc. All records of inspections shall be kept in the respective location's security and/or safety files and retained for a period of time, no less than one year. Where applicable, this checklist shall be provided to the on-site security staff and/or Environmental Health and Safety (EHS) leader to be used in the routine security inspection process, and shall be immediately updated whenever HazMat locations are changed.

Each business component shall also implement adequate internal accountability and tracking procedures for all pertinent amounts of HazMats handled or stored at that facility.

Loaded trailers containing HazMats cargo shall be sealed with a barrier-type seal, heavy-duty lock, and fitted with a king pin lock at all times while staged at any company facility. Facilities where HazMat cargo is staged inside a perimeter fence with access control at gates and doors (guards or badge access), a visitor escort system and other security methods (e.g., cameras, lighting, employees in the HazMat areas, etc.) may opt not to employ these methods.

### Attachment D: HazMat Information Security

All information (both electronic and paper) relating to the HazMat movement or storage should be restricted to only those GE employees and contractors having a need-to-know. Access to HazMats load information should be limited to operations personnel only, which typically includes dispatchers, operations manager, and authorized warehouse & dockworkers. All storage, inventory, purchasing, shipping and receiving documents & informational repositories (electronic databases) pertaining to, or referencing types or amounts of, HazMats shall be restricted to only those persons with a need-to-know.

Where trailers containing placardable amounts of HazMats are staged for transport, all paperwork detailing contents of the trailer shall be adequately maintained and secured separate from the vehicle.

#### Attachment E: En Route Security for Motor Carriers

It is the responsibility of each GE component to ensure all carriers transporting HazMats under a GE bill of lading are qualified to do so and meet the minimal Department of Transportation (DOT) safety and security requirements. The following guidance regarding HazMat carriers is provided:

When qualifying a carrier to ship HazMats, you must consider the carrier's current safety rating (SafeStat score) and review all relevant safety-related data as found in the carrier's detailed profile summary report, such as:

- The carrier's current safety rating (must have a SATISFACTORY rating);
- · Recent compliance review/audit data; and
- · A review of all data found in all four Safety Evaluation Areas (SEAs).

All carriers must submit information regarding their driver/employee hiring, screening, and review process. Carriers must ensure their drivers remain qualified through an annual review, and must provide verification documentation. At a minimum, carriers must demonstrate they have in place an appropriate and thorough background investigation process for all drivers, that includes:

- Previous employer inquiries;
- · Driving records review; and
- · Criminal conviction investigations.

Before loading any HazMat or hazardous waste, the identity of the driver and motor carrier must be verified. Drivers should be asked to produce photo identification and current operator's or CDL, and the carrier should be contacted to verify the:

- Driver's name and license number;
- · Tractor/truck number; and
- · Trailer number.

In addition, before loading the driver should be asked the name of the cargo's consignee and destination. The information provided must be confirmed with the company's records before releasing any HazMats shipment.

After loading the HazMats or hazardous wastes, the trailer should be sealed with a company-issued barrier-type seal. All seal numbers, along with the date and time, are recorded in the presence of the driver on all shipping documents.

Also, it should be verified that the motor carrier has terminal-to-truck tracking and communication capabilities.

### Attachment F: En Route Security For GE HazMat Fleet Vehicles

Company Assigned Equipment - Each driver should be assigned a heavy-duty padlock, and a receipt is obtained for the lock from each driver. The padlock should be used in conjunction with trailer door seals for every assigned load involving HazMats.

Drivers are responsible for and are expected to use their padlocks. In addition, when in use, the padlock's number should be recorded on delivery manifest or bill of lading along with the trailer's shipper-issued seal number(s).

Point-of-Origin Driver Security Procedures - Upon arrival at the HazMat load's point of origin, all drivers must check in with the responsible shipping personnel to notify them of arrival and to provide picture proof of identity. Drivers are expected to produce their current operator's or CDL. While at the shipper, drivers must follow the loading instructions and obey all customer safety and security rules and procedures.

At the designated loading location (assigned dock door), the driver must secure the vehicle. No company vehicle may be left unattended until the driver is confident the vehicle is secured from moving.

Shipper Load & Count - In the event a driver is scheduled to pick up a trailer preloaded with HazMat(s), he or she must verify:

- · The load's shipping papers;
- · Seal numbers; and
- Trailer number.

A driver must not to break a seal on a pre-loaded trailer or a trailer moving under a shipper's load and count provision, except under emergency situations. These guidelines apply to outbound loads as well as loads being picked up and returned to a terminal or spotting/staging area.

In the event of a live load, drivers are expected to supervise the entire loading process. Drivers must ensure no unauthorized or unscheduled cargo is loaded on any trailer.

When all loading activity has been completed, drivers must ensure the cargo is secure and to check the bill of lading or the delivery manifest for an accurate cargo count. Once drivers are satisfied that the cargo matches the shipping papers, they must:

- · Close the trailer doors and witness the shipper sealing of the trailer;
- · Record the seal number(s) on the shipping papers; and
- Have the shipping papers signed by the responsible shipping personnel before leaving.
- Contact their supervisor/dispatch to verify all pertinent load-related information and the loading process has been completed.

If a discrepancy is found between the cargo and bill of lading or shipping manifest, drivers must contact their supervisor immediately for instructions.

In the event the shipper fails to supply a seal, drivers are required to use a companyissued seal. Seals can be obtained from any company supervisor. Drivers must use their padlocks to provide additional cargo security for all loads containing HazMats. However, if using a padlock would cause any damage to the trailer door seal, attempts to use the padlock should not be made.

Before leaving any shipper, drivers must make a thorough visual observation of their immediate surroundings and report any unusual or suspicious activity to their supervisor immediately.

Hazmat En Route Standard Security Operating Procedures - Drivers, together with their supervisor/dispatcher, must prepare and execute trip plans for all HazMats movements that list:

- Routing schedules that avoid highly populated areas, bridges, and tunnels when possible;
- Fueling and break locations (including approximate dates and times for same);
- · Dates and times of daily/routine check calls; and
- · Estimated times of arrival to stop offs and final destination.

These trip plans also must include potential alternate routes and acceptable deviations.

For all HazMats movements, drivers must minimize stops en route. Proper execution of a thorough trip plans reduces the need for unnecessary or unplanned stops.

In the event a load containing HazMats is staged at a company terminal or facility while en route, it must be stored in a secured (fenced in) location with limited and controlled access.

For large and/or significant HazMat shipments, which could pose a potential high-risk environmental threat, business leaders should implement additional precautions, such as two-driver teams and/or security escorts.

En Route Driver Security Guidelines & Procedures - Dispatch/Operations must make every effort, such as working with consignees, to arrange HazMats delivery schedules that minimize in-transit down time. In most cases, this means that dispatch schedules loads for delivery as early as possible based on drivers' available hours and the consignee's receiving hours of operation.

While in transit, drivers are **prohibited** from discussing information related to their load, route, or delivery schedule with any person(s) other than authorized company officials. Drivers failing to abide by this policy are subject to disciplinary action up to and including termination of employment. Drivers are to report any suspicious activity

(including load-related inquiries from strangers) to their supervisors immediately.

Drivers are expected to take all reasonable and responsible precautions to prevent damage to company vehicles and theft of HazMat cargo while in transit.

For personal protection and safety, and the security of the cargo, drivers are expected to park in safe, well lit, designated truck parking locations only (such as reputable truck stops or high-traffic, major rest areas). When possible, trailers loaded with HazMats should be parked against a wall, fence, or other stationary/fixed object to enhance cargo security.

In all cases, drivers are required to inspect their vehicle and trailer for evidence of tampering after each stop.

Drivers must lock their vehicles and have all windows in the closed position at all times while in transit, especially during all time spent in urban areas, and parked at truck stops and rest areas.

When possible, dispatch contact receivers for the purpose of arranging secure overnight or after hours parking for drivers who can safely and legally arrive at their destinations ahead of schedule.

Drivers are **prohibited** from taking their equipment (loaded or empty) to or through home, or parking in any unsecured area. Drivers failing to abide by this policy are subject to disciplinary action up to and including termination of employment.

Drivers are expected to maintain regular communications with GE while in transit. Any incident of drivers failing to check in when required is assumed by the company to be suspicious and highly irregular. Immediate action is taken in such situations. Drivers are expected to fully understand this procedure and make every effort to maintain regular contact and communication with dispatch.

Hijack or Cargo Theft Driver Guidelines - Drivers who fall victim to vehicle hijackers or cargo thieves should notify local police as soon as possible. Once the proper authorities have been notified, drivers must contact an appropriate company official and follow all subsequent instructions.

Drivers are prohibited from picking up and transporting any unauthorized person.

In the event of an attempted vehicle hijacking or cargo theft situation while the vehicle is in motion, GE has a NO STOP policy. Drivers who believe a vehicle hijacking is, or may be, in progress, should keep the vehicle moving as safely and responsibly as possible until the attempt has ceased and/or the authorities have been notified. However, in any hijack situation, drivers must use their own good judgment (whether to stop or keep moving) based on the degree to which they feel their personal safety is at risk.

Stop Off/Destination Driver Security Procedures - Upon arrival at the destination or stop off, drivers must check in with the responsible receiving person(s) to notify them of arrival, show picture proof of identity, and receive unloading instructions. Drivers must follow receiver's unloading instructions, and obey all customer plant safety and security rules and procedures.

Once permission to unload has been given, the driver must proceed to the unloading location (assigned receiving dock door) and secure the vehicle. No company vehicle is unattended until the driver is satisfied that the vehicle is secure from moving.

The driver, along with a responsible receiving employee, must verify delivery, inspect the trailer seal(s), match the seal number(s) with those on the shipping papers, break the seal(s), open and secure the trailer doors, and inspect the cargo. Once both the driver and receiver are satisfied, the driver must back the trailer and secure the vehicle.

Drivers must supervise the unloading process. In the event of cargo damage, overage, shortage, or any other discrepancy, drivers must contact their supervisor immediately for instructions and to report the cargo claim incident.

After the unloading process has been completed, the driver must get the appropriate paperwork signed by the responsible receiving employee, and contact dispatch for the next assignment or instructions.

# APPENDIX B

CEP Security Crisis Management Policy

CM-RVAT Crisis Communication Worksheet FMEA

# Security & Crisis Management

Issued: October 31, 2001

#### **Overview**

The Company has no greater responsibility than protecting our people, our workplaces, our communities and the continuity of our business.

The Company has issued this policy to outline the basic security and crisis management measures that every GE business must have in place. The particular form of these security and crisis management measures will vary according to the nature of each business and the particular risks that it must address. But every business must implement a rigorous and comprehensive security and crisis management plan that systematically addresses security—measures for preventing terrorist and other criminal acts—emergency response and business continuity with respect to our people, facilities, information assets and supply chain. Vital parts of any such plan are processes for decision-making and for communicating with our employees and communities during a crisis.

#### Contents

Core Requirements

Security and Crisis

Management Infrastrucure

<u>People</u>

**Facilities** 

Information Security

Supply Chain

Crisis Decision-Making and

Communication

Related Policies and

**Procedures** 

Resources



#### Core Requirements:



- The leader of each GE business is personally responsible for implementing a rigorous and comprehensive security and crisis management plan.
- Each plan shall include a process for identifying, and protecting against, the risks
  posed by criminal activity and terrorism to people (employees as well as other people
  working at or visiting GE facilities); to facilities; to information technology assets and systems; and to the supply chain.
- The plan shall also include a crisis management process to (a) plan and provide for rapid
  and effective response to emergencies, including appropriate coordination with public safety and law enforcement officials and (b) plan and provide for business continuation as soon as possible.
- The plan shall also include a process for communicating, as appropriate, about prevention, emergency response and business continuation with the GE community, government officials, the media and the public, among others.
- The leader of each business shall implement appropriate dashboards and other metrics to measure the execution and effectiveness of its comprehensive plan.
- Each business shall incorporate compliance with the requirements of this policy in its Session D processes (and, where relevant, Session E processes). The Corporate Policy Compliance Review Board will review the execution and implementation of this policy in each Session D.

 The leaders of each business shall take all steps they deem appropriate in addition to the specific measures discussed below, including appropriate drills, education and training.



# Security and Crisis Management Infrastructure:



- The security and crisis management function shall be regarded as a core competence
  of the business, and each business shall devote adequate resources to ensure the effective implementation of the comprehensive security and crisis management plan.
- Each business leader shall appoint a crisis management leader, reporting to the business leader, who shall have the lead responsibility for preparing the business for crisis management and prevention, and for coordinating the response of the business in the event of an emergency.
- Each business leader shall appoint a director of security with extensive law enforcement and security experience and professional capabilities to deal with evolving security risks.
- Corporate Security (Fairfield) will ensure consistent security levels throughout the Company and will act as a resource for security directors assigned to the businesses.



### People:



- Each business shall implement effective measures to protect employees and other persons from terrorist or other criminal risk, including:
  - measures for safely screening and managing the flow of mail, packages and other correspondence and for training employees in the proper handling of suspicious items
  - evacuation procedures, providing clear and timely instructions to ensure personal safety in the event of a security incident
  - timely medical counseling and assistance
  - steps to minimize the risk of workplace violence
  - steps to address travel-related security risks
  - a process for gathering and tracking information on persons or groups who have expressed unusual interest in the company or its personnel and for sharing such information with security personnel throughout the company
- Each business shall adopt appropriate measures for screening the backgrounds of employees, contractors and other persons involved in Company matters.
- Each business shall ensure that employees travel to higher risk locations only with appropriate approval of the business and relevant National Executive, and that the business has implemented an automated system for tracking the locations of employees traveling on business. National Executives responsible for Level I and II countries shall, in consultation with the businesses, adopt contingency plans for the emergency evacuation of employees and their families.

See http://webp50.corporate.ge.com/corpsecurity.

#### Facilities:



- Each business shall implement a system for ensuring that only authorized personnel
  are permitted in GE facilities and that access to sensitive areas within such facilities is
  appropriately limited. This shall include photo identification cards for employees and
  separate identification cards for contractors and visitors, including, where feasible,
  electronic badging systems.
- · Each freestanding GE facility must have adequate perimeter and internal security.
- Each GE facility must have an identification or pass system for controlling access by cars, trucks, and other modes of transportation.
- Each business, in consultation with Corporate Environmental Programs, shall identify each site that, because of the nature of its operations, poses a heightened risk of personal injury or property damage to the community in which the facility is located. The business shall ensure that physical security measures, commensurate to the risks associated with such sites, are implemented and that an appropriate emergency response plan has been implemented at each such facility. In particular, for any higher risk areas within a site, there shall be procedures to ensure that only authorized personnel have access to such areas.

#### Information Security:



- Each business shall put in place appropriate controls and recovery procedures to guard critical data.
- Each business shall institute appropriate measures to protect servers, networks, and other elements of its information security infrastructure from sabotage.
- Each business shall establish redundant systems, as appropriate, to protect critical elements of its information security system.
- Upon disposition or retirement of system assets, all data (user data, configuration files, etc.) should be erased and protected from recovery.
- Each business shall ensure the implementation of all of the elements of the Corporate Information Security Procedure. <a href="http://integrity.ge.com/ombuds/Security.htm">http://integrity.ge.com/ombuds/Security.htm</a>

# Supply Chain:



- Each business shall have in place, as part of the comprehensive plan, measures to assure the continuity of the supply chain.
- The supply chain component of the plan shall include plans for sufficient buffer inventory and supplies (minimum of five days, but may be more depending on the needs and demands of the particular business); for alternate sources of air transport (and priority on regular carriers upon a resumption of service if all service is interrupted); and for alternate sources of supply where necessary.
- Each business shall, at a minimum, ask key suppliers to consider adopting their own security and crisis management policy and, as appropriate, shall share best practices with such key suppliers.



## Crisis Decision-Making and Communication:



- Each business, as part of the comprehensive plan, shall have in place plans for decision-making and communication relating to the other elements of the plan. Of special importance is the component of the plan outlining the measures to be taken to respond to an emergency. The purpose is to mitigate the conditions posed by an emergency and to ensure timely and effective response and communication while the emergency condition exists.
- The crisis management team should be headed by the business leader, with direct support from the crisis management leader, and should normally include EHS, IT, security, communications, HR, legal, sourcing and medical representation.
- This decision-making and communication component of the comprehensive plan shall include, at a minimum, the following elements:
  - a crisis command center
  - a designated cross-functional crisis management team
  - detailed contingency plans, where feasible, for emergency response and communication, including plans for communication with employees, customers, share owners, government officials, members of the community and the media
  - plans for appropriate coordination with law enforcement and public safety officials
  - business continuity plans
  - delegations of authority in the event of the incapacity of the business leader
  - a web-based crisis management site with the process and information on crisis response
  - training of designated leaders in crisis management



### Related Policies and Procedures:



Environment, Health & Safety (Policy 20.3)
Information Security Procedure
Controllership (Policy 30.7)



#### Resources:



- Corporate Security
- Corporate Medical Services
- Information Management Council
- Corporate Environmental Programs
- Corporate Public Relations
- Corporate Legal

# Introduction

#### And Quick Start Guide

#### **GE** Corporate

# Crisis Management - Risk Vulnerability Assessment Tool Module I - Prevention (Security & Site Hardening)

This self assessment is a simple way to identify general security risks at your site and to determine if your site meets the minimum recommended GE Corporate Security and Site Hardening guidelines. Please review the following 5 easy steps on how to use this tool.

- 1) Complete the Site Information section below. Provide as much information as possible.
- 2) Complete the questions on the Risk Criticality Assessment page. Answer every question as accurately as possible. <u>Leave no question unanswered</u>. After completing this page you may view the Security CTQ's page to identify your Risk Profile. There is no input required on the Security CTQ's page. Clicking the headings of each Risk Profile column will open the documentation for that Risk Profile category.
- Complete the questions on the Self Assessment page. Please note that you must answer all questions in order to complete the assessment and receive a baseline score for each Security Category.
- 4) Click the Gap Analysis page to review your report. CTQ requirements which are not met will be brightly colored. Use the appropriate columns to create an action plan and schedule in order to meet the minimum requirements. For more detailed information on the GE Corporate Security and Site Hardening guidelines for your Risk Profile click the link that matches your Risk Profile at the top of the GAP Analysis page.
- 5) Finally, provide an inventory of the existing security equipment in your facility on the page marked Inventory. If your facility does not have a the equipment requested, leave that entry blank. Please provide as much information on this page as possible. A section is provided for free form notes and comments. This tool is to be used as a guide for minimum security and site hardening standards. It is your responsibility to evaluate all risks at your site. This tool and and the GE Corporate Security and Site Hardening guidelines are not a total security solution and further security evaluations may be required.

#### Site Information Business Component: Corporate Environmental Programs Sub Component: Location Name: Area 28 Remedial Action Street Address: Krouner Road City: Nassau State: New York Zip: 12123 Country: US United States Facility Manager: Edward K. LaPoint Facility Manager Telephone: 518-862-2734 Facility Manager Dialcomm: 232-2734 Security Contact: Edward K. LaPoint Component Crisis Management Leader: Edward K. LaPoint Component CML Telephone: 518-862-2734 Component CML Dialcomm: 232-2734 Owned. Leased or Operated\*: Sole Tenant or Multi-Tenant: Other GE Businesses at this Location: Police Department Having Jurisdiction: NYS Police/Rens. Co. Sheriff Location of Nearest Fire Dept: Hoags Corners FD/ Route 66 Number of Employees: 1 Number of Contingent Workers: 10 Total Site Occupancy: 11 Total Site Square Footage: 27.878

# Risk & Criticality Assessment

### Corporate Environmental Programs Krouner Road Nassau

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Question	Answer
What country is your facility located in?	US United States
This facility houses business processes that have been rated High, Medium or Low criticality (please use the highest rated process)?	Low Criticality
This facility is located in a region that would be described as Urban, Suburban or Rural?	Rural
This facility is located in an area that would be described as Industrial, Commercial, Office Building Downtown, or Office Park?	Residential
This facility could be described as what type of site?	Light Manufacturing
What is the proximity of this facility to major tourist attractions or a major landmark?	0 to 300 feet
What is the estimated response time for of emergency services?	de to to tiam
What is the estimated daily volume of visitors to this building?	Low (6-50)
Is this facility located near a major highway?	Light Use Highway
What is the proximity of this facility to an active railroad line?	5+ miles
Is this facility located near a major water route or deep water harbor?	None Nearby
Is this facility located near a major military installation?	no installation nearby
Is this facility in the normal flight patterns of commercial or military aircraft?	Sometimes
Is there a nuclear power plant, nuclear reactor, or nuclear waste facility located within 50 miles of this facility?	No
What is the proximity of this facility to a retail gasoline outlet?	1 to 3 miles
What is the proximity of this facility to large fuel storage tanks (more than 1000 gallons capacity)?	1 to 3 miles
What is the proximity of this facility to hazardous chemicals stored in excess of five gallons?	300 feet to 1 mile
What is the proximity of this facility to hazardous chemicals used in manufacturing or	3
research functions at or nearby your business operations?  What is the level of crime that has occurred within the last 12 months within the	None nearby
vicinity of this facility? (off property)	None
During the last 12 months, what is the frequency of crime against people at this facility? (Examples include: assault, rape, battery, etc.)	None
During the last 12 months, what is the frequency of crime against property at this facility? (Examples include: vandalism, sabotage, theft, etc.)	None
Has an employee, contingent worker, or visitor ever voiced concern about feeling	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
unsafe going to or from their vehicle at this facility?  Has an employee, contingent worker, or visitor ever voiced concern about a recurring	i No
security issue?	No
Is there a general perception that the area where this facility is located is "safe" and "secure"?	Yes
Are there special security needs (which may be caused by facility location, GE	
business functions, or other factors) that should mandate consideration for additional security precautions at this facility?	No
What is the value of GE assets (tangible/intangible) maintained or used at this facility	
(excluding real estate and building value)?  Are there any assets at this location that have a historic or intangible value?	Less than 1 million
Does this facility contain expensive assets or hard to replace equipment that are vital to company business processes? (Examples include: servers, application systems,	3140
etc.)	No
What is the number of GE employees and contingent workers employed at this facility?	1 to 24
	1 or more non-GE
This facility is occupied by GE Business groups only or 1 or more non-GE tenants?	tenants Moditum
Risk Factor:	Medium

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ecurity Categories ccess Control	Hot	Medium-High	Medum	Low
ccess Control	<ol> <li>All Employees &amp; Full-Time Contingent Workers Must Wear GE-based Photo ID Badges.</li> </ol>	All Employees & Full-Time Contingent Workers Must Wear GE-Issued Photo ID Badges.	<ol> <li>All Employees &amp; Contingent Workers Must Wear GE- Issued Photo ID Badges.</li> </ol>	<ol> <li>All Employees &amp; Contingent Workers Must Wear Issued Photo ID Badges.</li> </ol>
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ocks & Keys	Locks and Key Control Plan to GE Corporate     Standards	Locks and Key Control Plan to GE Corporate     Standards.	Locks and Key Control Plan to GE Corporate     Standards.	1) Locks and Key Control Plan to GE Corporate
	GE Locking Mechanism (Key Lock, Push Button) On All Perimeter & Restricted Area Doors		2) GE Locking Mechanism (Key Lock, Push Button) On All Perimeter & restricted Area Doors	Standards,  2) GE Locking Mechanism (Key Lock, Push Button) All Perimeter & restricted Area Doors
	3) Electronic Access Control	3) Electronic Access Control	3) Electronic Access Control	Val Petroeudi & restricted Area Doors
	Individually Programmable Access (Levels)		Individually Programmable Access (Levels) (if applicable)	
lectronic Security Devices	1) Building Equipped w/ Basic Fire Alarm System	1) Building Equipped w/ Basic Fire Alarm System	1) Building Equipped w/ Basic Fire Alarm System	1) Building Equipped w/ Basic Fire Alarm System
	2) Intrusion Detection System	2) Intrusion Detection System	2) Intrusion Detection System	2) Intrusion Detection System
	- Door Contact Switches - Electronic Door Hardware	- Door Contact Switches - Electronic Door Hardware	- Door Contact Switches	- Door Contact Switches
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ighting	11) Entry Point Lighting	1) Entry Point Lighting		designation of the property of the state of
ygnong	2) Parking Lighting		1) Entry Point Lighting 2) Parking Lighting	Entry Point Lighting     Parking Lighting, if applicable
	(3) Area Lighting		3) Area Lighting	2) Parking Ughang, it appreciable
	4) Special Purpose Lighting	4) Special Purpose Lighting		
	5) Boundary Lighting			
niformed Guards	1) Security Receptionist	1) Security Receptionist	1) Security Receptionist, if Applicable	None
monnes dans	2) 24x7 Site Security Patrol	2) Roving Patrol, Where Appropriate	i) deconly Necephonist, il Approacte	lyone
Period of Contract States of States Contract States and States	3) Direct Communication to GE Control Center	3) Direct Communication to Central Station		
arking	1) Employee Vehicle Registration		None	None
- Thirty		s 2) Contingent Worker/ Vendor/ Visitor Parking Restrictions	regite	None
erimeter Protection	1) Perimeter Protection Required Around Greatest		maker old same year of the second second	LETTERS AND TEST OF THE CONTROL OF T
	Available Perimeter (Building Entrances, Landscaping, Fences, Gates)		Perimeter Protection Required Around Greatest     Available Perimeter (Building Entrances, Landscaping, Fences, Gates)	Perimeter Protection Required Around Greatest Available Perimeter (Building Entrances, Landscapi Fences, Gates)
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mergency Support	Emergency Generator Back-Up Power and UPS	Emergency Generator Back-Up Power and UPS - Site     Dependent	UPS Back-up for Mission Critical Equipment	UPS Backup for Mission Critical Equipment - Site     Dependent
ecurity Staffing	1) Security Manager		1) Security Manager Assignment	1) Security Manager Assignment
	Site/Facility Bacurity Contact     Security Director (SC)	2) Sta/Facility Security Contact	2) Site/Facility Security Contact	
CTV	(1) CCTV System	1) CCTV System	1) CCTV System	A CONTRACTOR OF THE PARTY OF TH
	2) CCTV Recording 3) On Site Montioring		1) CCTV System 2) CCTV Recording	None
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# Self Assessment (Baseline) Corporate Environm Krosiner Road Nassau

Risk Factor	Medium
Security Category	Status
Access Control	Edward Barentalks p treatment
Locks and Keys	Polyoffall on Identified his
Electronic Security Devices	Pertural straigs manufactures
Lighting	Meets CTQ
Security Staffing	Control of the Boles and State Description of the Control of the C
Building Exterior/Landscape	the control of satisfit and feet the edition of the
Parking	Drine half in annual test in
Perimeter Protection	Bosenial Spinonibura
Emergency Support	Meets CTQ
CCTV	Properties Companied Indian

You mu	ist answer all questi	ons in each section in order to complete tool			
	n Number	Question	Answer	Guide Note	Comments
Access Control	1	Are all employees and full-time contingent workers required to wear photo ID badges at all times while on	No	Photo ID badges can double as access control badges which can be used to unlock doors.	
	2	company premises? Are temporary non-photo ID badges required for all casual vendors and visitors?	No	ID badges can double as access control badges which can be used to unlock doors and can be programmed to auto-	
	3	Is a visitor log-in and log-out procedure required?	Yes	terminate.  Log sheet or other mechanism for tracking visitor arrival times. Could be sponsor program.	
	4	Are all non-sponsored visitors required to be escorted?	Yes	Visitors should not be allowed to "roam".	
	5	Are contingent workers treated as visitors unless possessing a valid GE issued badge?	No	Contingent workers are visitors unless contracted for 90 days or more.	
	6	Does the facility utilize one main entrance for visitors?	Yes	Visitors should all be routed through a common area.	
	7	Is the main entrance to your facility equipped with electronic access control?	No	Primary employee entrance,	
	8	If yes, are you required to use the electronic access system to access the facility 24/7 ? If you do not have electronic access control please answer "No."	No		
	9	Is your perimiter equipped with electronic access control?	No	Card access system for perimter and sensitive restricted ereas. Perimeter is defined as the outermost perimeter of your leased or owned responsibility. I.e. suite, office, building, series of buildings or campus.	
	10	If you have an electronic access control system, is it regularly audited for expired, duplicate and suspended badges? If you do not have a electronic access control system, please answer "No."	No	System must be kept up to date in order to function properly.	
	11	If you have an electronic access control system, is it regularly backed up? If you do not have a electronic access control system, please answer "No."	No	Data kept safe in case of equipment failure,	
NOTE TO STATE OF THE STATE OF T	12	If you have an electronic access control system, are access control cards programmed to allow the minimum level of access needed for the cardholder to carry out their work and related tasks? If you do not have a electronic access control system, please answer "No."	No	Card holders should only have access to areas of the facility needed in their daily routine.	
	13	Are delivery entrances separate from employee and/or public entrances?	No		
	14	Do you have electronic access control to all sensitive or restricted areas (i.e. Electrical or mechanical closets, telephone rooms, server rooms, etc.) within this facility?	No		Only hub room. E3 needs access controls.
	15	If you have an electronic access control system, are all electronic access control egress points equipped with CCTV coverage that shows the face of the individual leaving the building? If you do not have a electronic access control system, please answer "No."	No	This allows matching of faces to badges in case of lost/stolen badge use.	
	16	Are electrical closets and mechanical rooms kept locked at all times?	No	Never allow general access to facility utilities.	
	17	Are exterior doors "routinely" being propped open?	No	Locks only work if doors are closed.	
	18	Are perimeter doors and any door leading into a restricted area (i.e. TeleData, Mechanical) equipped with a key lock or combination code mechanism?	Yes	Some form of security should be on these doors.	
	19	Do you track who enters or leaves all sensitive or restricted areas in the facility?	Yes		
Locks and Keys	And Line also	Comment of the second			

# Self Assessment (Baseline) Corporate Environm Kroun

Risk Factor	Medium		
Security Category	Status		
Access Control	The Company Contraction of the C		
Locks and Keys	Person of Saprome for Landson San		
Electronic Security Devices	and the Polestic Contraction in the		
Lighting	Meets CTQ		
Security Staffing	Personal Property of the region of the		
Building Exterior/Landscape	a sufficient state in a resident		
Parking	Committee of the Commit		
Perimeter Protection	Pallential God fortunated		
Emergency Support	Meets CTQ		
CCTV	Forested to the late of the second		
You must answer <u>all</u> que Question Number	stions in each section in order to complete tool Question	Answer	
46	Are Security Guards on duty 24 hours a day, 7 days a week?	No	
46 47	Are Security Guards on duty 24 hours a day, 7 days a week? Is a roving patrol utilized where appropriate?	No No	Patrolling guard or guards.
46	Are Security Guards on duty 24 hours a day, 7 days a week?	No	
46 47 48	Are Security Guards on duty 24 hours a day, 7 days a week? Is a reving patrol utilized where appropriate? Does the roving patrol have direct communication to a Central Station?	No No	Patrolling guard or guards.
46 47 48	Are Security Guards on duty 24 hours a day, 7 days a week? Is a roving patrol utilized where appropriate? Does the roving patrol have direct communication to a Central Station? Is the building entrance designed to prevent cars from	No No	Patrolling guard or guards.
46 47 48 Bulkding ExterionLandscape	Are Security Guards on duty 24 hours a day, 7 days a week? Is a reving patrol utilized where appropriate? Does the roving patrol have direct communication to a Central Station?	No No No	Patrolling guard or guards.

	Other State of			
Building Exterior Landscape				SATSESSAN TO
49	Is the building entrance designed to prevent cars from	No	A PERSONAL PROPERTY OF A SECURITY OF A SECUR	DAVING BUILDING STATES AND STATES OF THE STA
	driving up to or into the lobby?		Prevent intruders from using vehicles as battering rams.	
50	Is landscaping neatly maintained at building entrance and	No		
51	exits at this facility?  Are air intakes located at the highest practical level to	Ma	Prevent intruders from using vegetation for concealment.	
	reduce the risk of airborne contaminants being introduced into the ventilation system?	No	The higher the air intake, the less risk of contaminantation since most contaminants are heavier than air and tend to accumulate in low areas.	
52	Are incoming site utilities concealed or encased?	No	Protect or hide utilities to prevent access by intruders.	
53	Is the emergency generator, if any, located away from high threat areas such as loading docks, entrances, or parking areas?	No	In case of explosion, generator should still be operational,	
54	If there is a helipad on campus, is there a clear zone of at least 500 yards in every direction of the helipad? If you do not have a helipad, please answer "No."	No	Eliminate potential hiding places around sensitive areas	
Parking		40196	ova pario de la formación de la cele	STANDARD CAPITA
55	Is the parking area owned and maintained by GE?	Yes	Can GE make changes to the area.	RESIDENCE CONTRACTOR OF THE PARTY OF THE PAR
56	Is the parking area regularly patrolled by security personnel?	No		
57	Do the parking areas have security personnel to escort employees to their vehicle after hours?	No		
58	Do the parking areas have physical structures such as	Yes	Deny hiding places to possible intruders.	
	trees, shrubs, or columns that may obstruct viewing by security personnel or CCTV cameras?			There are columns in the parkir garage.
59	Are the parking areas in a clear line of sight from the hullring?	Yes	Easily seen by security or other personnel	The parking garage is below th building.
60	Is the parking area contained within a perimeter fence?	No	Prevents casual intruders.	
61	Are emergency call boxes provided in the parking area?	No	Remote intercom phones that dial direct to security	
62	Does the parking lot use electronic card access control and vehicle gates to gain access?	No	Not necessarily sed to the facility system. Could be a third party parking deck etc.	
63	Are there physical barriers separating parking areas and the facility grounds and building?	No	Could be bollards, rails, or natural dividers like trees, or ponds.	
64	Are personal vehicles allowed to park near the loading dock?	No	portion.	
65	Is a database of employee vehicle registrations	No	For evidence gathering, Ability to link vehicles to authorized	

66	maintained? Are contingent worker/vendor/visitor parking restrictions in place?	Yes	personnel, Keep GE personnel vehicles separate from visitors or temporary personnel vehicles.	Signage designates that visitors should park out front, however nothing restricts them from parking in the garage.
Perimeter Protection		an and a		
67	Does the facility have perimeter fencing?	No	First line of defense for high risk facilities.	AC ANTICACAMAN AND AND AND AND AND AND AND AND AND A
68	is the overall height of the perimeter fence over 7 feet in height?	N/A	Prevents easily jumping fence.	9
69	Does the fence have a 3-4 strand barbed wire top guard?	- N/A	Prevents easily scaling fence.	
70	Is there at least a 10 foot clear zone along the fence line free of vegetation and climbing aids?	N/A	Allow easy viewing of anyone approaching fenceline.	
71	Does the fence have any culvert or open ditches which are not covered by the fence?	No	These are holes in your fence.	(A)
72	Is the fence taut and securely fastened to rigid metal posts set in concrete?	N/A	Fence is solid and in good repair,	
73	Does the fence construction create a visual obstruction to the other side?	N/A	Can you see clearly through the fence.	-
74	Is erosion present along the fence line?	N/A	Erosion can weaken and undermine the fence.	
75	Are there gates located along the fence line?	No		3
2 76 E	Are the gates along the fence line made from the same meterial as the fence?	N/A		-

maintained?
Are contingent worker/vendor/visitor parking restrictions in place?

personnel.
Keep GE personnel vehicles separate from visitors or temporary personnel vehicles.

# Self Assessment (Baseline) Corporate Environm Krouner Road Nassau

Risk Factor	Medium
Security Category	Status
Access Control	The second design and designed a residue.
Locks and Keys	A Common of the
Electronic Security Devices	A Part of Part of The Control of the
Lighting	Meets CTQ
Security Staffing	incremely long compliant
Building Exterior/Landscape	50 4 14 14 Withins a Copy contribution of the
Parking	College in the College in the Cap
Perimeter Protection	Pringilla Cap de Line
Emergency Support	Meets CTQ
CCTV	Majorita Rap Son God

#### You must answer all questions in each section in order to complete tool

77	Are the gates along the fence line kept locked and secure	N/A	
	at all times?		
78	Is CCTV coverage provided along the fenced line or around the perimeter?	N/A	Closed Circuit TeleVision,
79	Is the lighting level sufficient for CCTV coverage?	No	Can the CCTV cameras monitor the fenceline during darkness.
80	Are intrusion detection alarms used for perimeter protection?	No	
mergency Support			
81	Does the facility have emergency generator back-up	N/A	
	power in the event of a power outage?	<b>第四周</b> 章	
82	Does the facility have UPS systems in place for mission critical equipment?	N/A	Protection on servers and computers deemed critical.
ETV			
83	Is CCTV/surveillance utilized at the site?	No	Closed Circuit TeleVision
84	Is CCTV coverage provided for the primary entrance at this facility?	No	Allow monitoring of incoming and outgoing personnel.
85	Is the CCTV system actively monitored on site?	No	Security console on site,
86	Is the CCTV system archived to a VCR or digital recorder?	No	Save video for evidence gathering.
87	Does the CCTV system interface with the alarm or access control system?	No	Can cameras be set to respond in the event of an alarm.
88	Has there ever been an incident which required the use of archived video?	No	Was the video tape or archived data used in an investigation

Proceed to 4) Self Assessment 4

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Corporate E

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100			
	Links to Risk Profile CTQ documentation:	Hap Bak Potis	
		Medium-Hoth Risk Profile	
		Medun Siar Profe	
		Low flish Drefts	
Calcinity Calcinosiae	Section 1	Security Security Security Security Security Mysth Tunion What	What Type Of Equipment?
Access Controls	1) All Employees & Contingent Workers Must Wear GE-Issued	At the personnel aniering the site must wear badges or	
	Photo ID Badges, 2) All Visitors Must Wear Non-Photo ID Badge.	most sign in and be recorded by supervisory	
STATE OF THE PROPERTY OF THE PARTY OF THE PA		EXI, CRT, NY Immediate   Yes	Macard stating sign invescori procedures
	3) Visitor Control and Exit Tracking Procedures	Yes	
	<ol> <li>Contingent Workers Follow Visitor Rules Unless Possessing GE- learned Photo ID Barbon</li> </ol>	No. 1 above	
	5) Un-sponsored Visitors Should be Escorted at All Times Within the	Yes	
選出の方式を いかいこうかい おおからから	Premises		S. COLOR STATEMENT POLICY
Locks & Keys	1) Locks and Key Control Plan to GE Corporate Standards.	THE TRANSPORT OF Ensure training and acurpment located when not in use. ENL. CRT, KH. Immediate I Yes. Pump bothsuis	SUR
	<ol> <li>GE Locking Mechanism (Key Lock, Push Button) On All Perimeter &amp; restricted Area Doors</li> </ol>		
	3) Electronic Access Control	Colonia No. Colonia applicable	
SATURDAY SATURATED BOOK SATURATION	4) Individually Programmable Access (Levels) (if applicable)	POLICE NO. THE applicable	MEDIUM PERSON SANGES
Electronic Security Devices	1) Building Equipped w/ Basic Fire Alarm System	The common of the contract of	shars
		Net applicable	
新されたはんだ。 は の は の に は の に は の に の の の の の の の の の の の の の		3739503	MARINE SANDONES CONTRACTOR
Building	2) Parking Uphting 3) Area Liphting	Yes Yes	
			Angeligh Colo. Selection
Uniformed Guards	1) Security Receptionist, If Applicable	DESCRIPTION Not appearing	
のできる。 は の の の の の の の の の の の の の			
Parking	None	No. Complete Applicable	
September Designation	1) December Designation Designated Assessed Considering	SALESCA O	48.89 F 9.73 SW 47.845
Perimeter Protection	Perimeter Protection residents Arcura Creation Available     Perimeter (Building Entrances, Landscaping, Fences, Gates)	(Chypon), periodic impection of the contraction of the contraction of the contraction in the contraction of the contra	
A STATE OF THE PERSON OF THE P	At 100 Dark on for Mission College Co. Comment		SANTAN SERVICE SELECTION OF
andino Analia	BOOK STATE OF THE	ies liter apparation	
Security Staffing	1) Security Manager Assignment	Michigan Assign security duties to onsite personnel	
	2) Site/Facility Security Contact	NOT THE ARIGN security duties to onsite personnel ERC, CRT, KH immediate No	
STATE OF STA	19 CCTU Contains		2年の一年の日本日本日の日本の
	2) CCTV Recording	No. 1900 No.	
	是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个		Name Contractor and American

Corporate Environn	nt information in order for Corporate to obtain a nenta Krouner Road	Nassau	
Card Access Software	Title		
Operating System	none		
Application	none		
ard Access Hardware	Manufacter, Make, and Model	Type	How many
Readers	none		100
Panels	none		560
trucios Dotostias Costas	mark plant (1984) and 1984		
rusion Detection System	Manufacter, Make, and Model		1613 (1823)
Burglar Alarm	none		
TV System	Manufacter, Make, and Model	Exterior	Interior
Cameras	none	LACCIO	16-9-12 MILENOISH PA
Recorder	none		
			M. SWILLSON
dors	Company	Contact	Phone
Card Access System	none		
Intrusion Detection System	none		
CCTV System	none		
			-2420-1
ditional Notes			
	Site is a rural remedial action project. Very few securit needed for this site.	y risks present. Security o	fevices

#### Crisis Communication Worksheet CEP Remedial Sites

How is your CEP remedial site identified in the community?
Area 28 Remedial Action
What is the exact address of your CEP remedial site?
Area 28 Remedial Action
Krouner Road Nassau, New York 12123
Provide an estimate of the size of any buildings and/or equipment pads at the CEP remedial site (Approximate sq. ft. of buildings and equipment pads).
10,900 (equipment pad of 10,000, three construction trailers of 900)
Provide the approximate number of GE and/or contractor employees located at the site? (Identify the approximate number of GE employees and/or contractors that are located at the facility on a daily basis, if any. Also identify the approximate number of GE Employees and/or contractors that visit the site on a periodic basis and identify the frequency of their visits)

Provide a very brief identification of the activities conducted at your CEP remedial site (groundwater pump and treatment, soil vapor extraction and treatment, sampling of monitoring wells, etc).

10

Specific Remedial Project - excavation of PCB containing soils and sediments

List key methods used to communicate with GE employees and/or contractors in an emergency (Attach a list of phone numbers and/or telephone tree, etc.).

Project Specific Health & Safety Plans

List name of Crisis Communication Lead, CEP Remedial Project Manager and Contractor Project Manager and provide emergency contact information for each

Edward K. LaPoint, PE Office 518-862-2734 Home 518-656-3059 Cell 518-744-4411 Pager 518-446-8428

#### Crisis Communication Lead for Most Remedial Sites:

Gary Sheffer:

Office # (203) 373-3476 Home # (203) 924-7520 Cell # (203) 253-9299

#### Process/Product Failure Modes and Effects Analysis (FMEA)

	Area 28 Remedial Action	
Responsible:	Edward K. LaPoint, P.E Project Manager	

Prepared by: Edward K, LaPoint,
P.E. - Project Manager

FMEA Date (Orig) 8/23/03 (Rev)

Process Step	Key Process Input	Pote mial Fallure Mode	Potential Fall ure Effects	\$ & V	Polentia Causes	000	Current Controls	DEF	R P N	Actions Recommenced	Resp.	Actions Taken	3 E >	000	DET	R P N
What is the process step		In what ways does the Key Input go wrong?	What is the timpact on the Key Output Variables (Customer Requirements) or internal requirements?	How Severe is the effect to the customer?	What causes the Key Input to go wrong?	How often does cause or FM occur?	What are the existing controls and procedures (inspection and test) that prevent either the cause or the Falture Mode? Should include an SOP number.	How well can you defect cause or FM?		What are the actions for reducing the occurrence of the Cause, or improving detection? Should have actions only on high RPV's or easy fixes.	Whose Responsible for the recommended action?	What are the completed actions taken with the recalculated RPN? Be sure to include completion monthlyear				
Vater Diversion	Water in Valatie KII	Flow above diversion capacity - dam intact	Suspends soil removal, may impact worker safety	5	Heavy rains	2	Daily inspections and maintenance, weather review, removal option, HASP procedures	2	20	None - use Current Controls	EK),	N/A	5	2	2	20
Water Diversion	Water in Valatie Kill	Flow above diversion capacity - dam fails	Suspends soil removal, may impact worker safety	10	Heavy rains, vandalism, terrorism	2	Daily inspections and maintenance, weather review, removal option, HASP procedures	2	40	None - use Current Controls	EKL	N/A	10	2	2	40
Soil removal	Soil containing PCBs	Inadvertent release during loading, transport on site, staging	Contaminates other areas of the site	2	Poor handling practices, accidents	2	Handling controls, site control features, decon procedures, continued diligence	2	0	None - use Current Controls	EKL.	N/A	2	2	2	8
Soil transport (off lite)	Soil containing PCBs		Contaminates off site area	5	Poor driving/load securing practices, accident	2	GE-approved hauler to be used, DOT regulations in effect	4	40	None - use Current Controls	EKL	N/A	5	2	4	40
ower Loss	Trailer use, lighting	power loss	Suspends trailer and lighting use, worker safety risk if loss caused onsite	2	Weather, onsite accident, vandalism, terrorism	2	Onsite controls are HASP procedures, lines buried or installed out of equipment reach	.1	4	None - use Current Controls		N/A	2	2	1	4
HVAC	Trailer use	Mechanical or power failure		1	Mechanical, weather, onsite accident, vandalism, terrorism	1	Trailer maintained by vendor, onsite controls are HASP procedures	1	1	None - use Current Controls		N/A	1	1	1	1
Telephone		Phone lines damaged off or onsite		2	Weather, onsite accident, vandalism, terrorism	1	Phone lines maintained by utility, onsite controls are HASP procedures, cell phones are onsite	1	2	None - use Current Controls		N/A	2	1	1	2
Data Loss	and site data	Fire or electrical damage	Destroys/damages paper and electronic data	2	Weather, onsite accident, vandalism, terrorism	1	Copies of data uploaded to office files regularly, onsite controls are HASP procedures	1	2	None - use Current Controls		N/A	2	1	1	2
Building Access Loss		Fire or electrical damage	Destroys/damages trailer(s)	3	Weather, onsite accident, vandalism, terrorism	1	Onsite controls are HASP procedures	1	3	None - use Current Controls	EKL	N/A	3	1	1	3
Site Access Loss	Remedial Action	Anthrax, explosion, flood	Suspends use of site and execution of Remedial Action	5	Weather, onsite accident, vandalism, terrorism	1	Onsite controls are HASP procedures	1	5	None - use Current Controls		N/A	5	1	1	5
Regional Disaster	Execution of Remedial Action		Suspends use of site and execution of Remedial Action	10	Weather, onsite accident, vandalism, terrorism	1	Onsite controls are HASP procedures	. 1	10			N/A	10	1	1	10
Country Crisis	Execution of Remedial Action	Civil war, outside party war	Suspends use of site and execution of Remedial Action	10	Government action	1	N/A	1	10	None - use Current Controls	EKL	N/A	10	1	1	10
									0				0	0	0	0
						_	100 -		0				0	0	0	0
									0				0	0	0	٥
						_			0				0	0	0	0
						-		-	0				0	0	0	0
	- SECUE FUEL	FMEA, MMW 9/26/2003							0				0	0	0	0

# APPENDIX C

Transporter's Documentation Verifying Compliance with 49 CFR Part 172

## APPENDIX D

Site-Specific HMTSP Training Record Form

# HAZARDOUS MATERIALS TRANSPORTATION SECURITY PLAN GE CORPORATE ENVIRONEMNTAL PROGRAMS - REMEDIAL SITES

Training Certification Sheet and Roster of Approved Personnel – Hazardous Materials Transportation Security Plan

Anca 20 Itemediai Aletton on	Area	28	Remedial	Action	Site
------------------------------	------	----	----------	--------	------

I acknowledge that I have been provided a copy of the site-specific Hazardous Materials Transportation Security Plan (HMTSP) that has been prepared by GE for the Site indicated above, and that I have received site-specific training with regard to the HMTSP contents. I have read and understand the procedures and requirements contained in the HMTSP, and agree to follow the plan while present at the Site, particularly when accessing and handling hazardous materials or hazardous wastes.

Employee/Contractor Name	Signature	Company	Date	Phone
	-			
	-			

The individuals listed above are authorized to handle hazardous materials on the Site property, including shipping hazardous materials on behalf of GE.

# New York State Department of Environmental Conservation

Division of Environmental Remediation

Remedial Bureau D, 12th Floor

625 Broadway, Albany, New York 12233-7013 Phone: (518) 402-9814 • FAX: (518) 402-9819

Website: www.dec.state.ny.us



AUG 13 2003

RECEIVED - ALBANY

Mr. Edward K. LaPoint, P.E. General Electric Company GE Corporate Environmental Programs 323 Great Oaks Office Park, Suite 323 Albany, New York 12203

AUG 1 4 2003

GE CORPORATE ENVIRONMENTAL PROGRAMS

RE:

Area 28 Remedial Action

Request for Proposal Site No. 4-42-006

Dear Mr. LaPoint:

The above-referenced RFP is compliant with the approved Remedial Action Work Plan, has been reviewed by Department staff, and is hereby approved.

Department staff, Russ Shaver or myself will be providing State oversight of the construction activities to be performed by SLC beginning August 18, 2003.

Status meeting should continue on a weekly basis. If you wish to contact me by telephone, please call me at (518) 402-9813 until my direct line is reactivated.

Sincerely,

James N. Ludlam, P.E.

Project Manager, Remedial Section C

Remedial Bureau D

Division of Environmental Remediation

cc:

K. Goertz - NYSDEC, Region 4

R. Shaver - NYSDEC, Region 4

R. Sloan - NYSDEC, CO

D. Munro - AG's Office

A. Bolensz - AG's Office

M. VanValkenburg - NYSDOH

J. Crua - NYSDOH

#### NYSDEC Area 28 Post Construction PCB Soil Sampling Protocol

This protocol sets forth procedures for NYSDEC determination and collection of post construction PCB soil samples during the Area 28 Remedial Action. This protocol may be adjusted upon mutual consent between NYSDEC and GE and/or based on encountered field conditions.

- Sample locations will be chosen by NYSDEC and collected and analyzed by GE or its consultants.
- Samples will be collected as composites from 0 to 6 inches below grade of removal polygon bottoms at selected locations. Additional 6-inch intervals may be selected below the first interval based on analytical results (see below)
- Samples will be collected with clean stainless steel equipment and will be submitted for PCB analysis for expedited turnaround.
- It is anticipated that samples will be collected from approximately 20% of the removal polygons (i.e., 7 to 8 locations). Historically, samples have been collected at an average 17% frequency on other Remedial Action projects:
  - Mead Road Pond IRM 45% (14 of 31 total polygons were sampled)
  - o T11A RA 9% (10 of 107 total polygons were sampled)
- Samples will not be collected from any removal areas until health and safety concerns are met.
- Samples will be collected from a variety of locations, including TSCA and Non-TSCA polygons, each side of or from within the Valatie Kill and from a range of depths below grade.
- Professional judgment, remedial goals, and sample location (i.e., depth, site location, lithologic horizon) will be factors used to determine if additional removal is warranted following receipt of sample data.
- It is anticipated that results requiring additional removal, following data assessment using the
  factors above, will be mitigated by approximate 2 foot by 2 foot by 6-inch excavation around the
  location in question, followed by additional sampling per this protocol.

# Appendix B

# **Representative Photographs**





August 19, 2003 - Southern View: Cleared area along the eastern bank of the Valatie Kill



August 20, 2003 - Northeastern View: SLC building the access road



 $August\ 20,\ 2003-Northeastern\ View:\ SLC's\ continued\ progress\ with\ construction\ of\ the\ access\ road$ 



August 20, 2003 – Northern View: Silt fence anchored with sand bags



August 22, 2003 – Southern View: SLC installed hay bales along the eastern perimeter of the access road adjacent to the caretaker's home



September 3, 2003 – Northwestern View: Bladder dam installed



September 3, 2003 – Southeastern View: SLC's, initial, temporary water diversion discharge off the eastern bank of the Valatie Kill, NYSDEC approved



September 4, 2003 – Northeastern View: Installing jersey barriers on the MSDP to serve as a driveway ramp



September 9, 2003 – Northwestern View: Dewatering of area downstream of dam



September 9, 2003 - Southeastern View: SLC placing excavated material on MSDP



September 9, 2003 – Southern View: SLC direct-loading excavated material from polygon NA-60 onto dump-truck



September 10, 2003 – Northeastern View: Excavation of polygon SA-97 with a confirmatory sample point in the center



September 23, 2003 – Southwestern View: Construction of water treatment system



October 2, 2003 – Southwestern View; SLC completed installation of the temporary access road extending across the Valatie Kill for access to NA polygons



October 3, 2003 – Southwestern View: loading out material from MSDP



October 7, 2003 – Eastern View: SLC mixing lime with material on MSDP for stabilization purposes (Lime proved to be an inadequate stabilizing material and after this photograph was taken, cement kiln dust successfully replaced lime as the stabilization material)



October 9, 2003 – Western View: SLC excavation of polygon NA-70 (North Section); SLC excavation of TSCA material (2.5-3.5~feet) in polygon NA-61



October 9, 2003 – Northeastern View: Excavation of polygon NA-61



October 10, 2003 – Example of refusal interval in northern section of NA-70 at 5 feet bgs



December 4, 2003 – Northern View; Construction of the crib wall along the eastern edges of polygons NA-71 and NA-78 and along the western edges of polygons SB-47 and SB-48



December 5, 2003 – Northwestern View; SLC installed topsoil on bank above wetland for soft armor and installation in the area of polygons NA-62, NA-70, NA-61, and NA-66



December 10, 2003 – Western View; SLC completed installation of hard armor on the eastern bank at downstream end of Area 28 along polygon NA-75



April 22, 2004 – Wetland restoration in polygons NA-75, NA-76, NA-65, and NA-66



April 22, 2004 - Soft armor, post-construction in polygons NA-75, NA-76, NA-65, and NA-66



April 22, 2004 – Construction of the transverse bar near polygon SB-39



April 22, 2004 – Foreground: Completed transverse bar in polygon SB-39. Background: Intermediate armor installed along the edges of NA-85 and SA-91



May 6, 2004 - Final restoration at polygons NA-75, NA-76, NA-65, and NA-66



May 6, 2004 – Planting trees along streambed bordering polygon SA-72 on the eastern bank of the Valatie Kill

# Appendix C

# **Post-Construction Sampling Data**



#### 1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NA-61

Lab Name: AES

Contract:

Matrix: (soil/water) SOIL

Lab Sample ID: 031009042-001

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A2386

Level: (low/med) LOW

Date Received: 10/09/03

% Moisture: not dec. 10. dec.\_\_\_\_ Date Extracted: 10/09/03

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/09/03

GPC Cleanup: (Y/N) N pH: 6.2 Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

12674-11-2Aroclor-1016	37.	11
11104-28-2Aroclor-1221	37.	U
11141-16-5Aroclor-1232	37.	U
53469-21-9Aroclor-1242	37.	U
12672-29-6Aroclor-1248	37.	U
11097-69-1Aroclor-1254	37.	U
11096-82-5Aroclor-1260	4.8	J

FORM I PEST



## CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:  BBL clo GE  Send Report To:	Loeffel	Address:	3 Tompoth	R (	e (Nam	5	41	acus	es In	4 13214
Chris Tore	W	CE Las (	Fel-Area 28	Sample	A.	C.	. 1			
Client Phone No: (315) 44 Client Fax No: (315) 4	6-250 +356	PO Number:	T3. 800	Sampler	s: (Sign	ature)				
AES Sample Number		ient cation & Locatio	Date n Sampled	Time A=a.m. P=p.m.	Sar	nple Ty	pe	Number	1000	Analysis Required
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Turnaround Time Request:			Special Instructions/Rema							
💢 1 Day 🗆 3 Day	☐ Normal		Etped	ites		90	+	Fr.	TA	7
☐ 2 Day ☐ 5 Day										
Chris Torell										
Relinquished by: (Signature)	mber		Received by: (Signature)							Date/Time
Relinquished by: (Signature)			Received for Laboratory by	1	2				10/0/0	Date/Time
TEMPERAT	URE		PROPERLY PRESERVED					RECEIVE	D WITHIN F	HOLDING TIMES
Ambient or Notes:	Chilled	Notes	Y N			1	lotes	·	Y	N .
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WHITE - Lab Copy

YELLOW - Sampler Copy

#### 1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NA-65

Lab Name: AES Contract:

Lab Code: AES Case No.: BBL0310 SAS No.: SDG No.: NA-61

Matrix: (soil/water) SOIL

Lab Sample ID: 031010014-001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: A2411

Level: (low/med) LOW

Date Received: 10/10/03

% Moisture: not dec. 15. dec.\_\_\_\_ Date Extracted: 10/10/03

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/10/03

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

		J. J.		
				17
	Aroclor-1016		39.	U
	Aroclor-1221		39.	U
	Aroclor-1232		39.	U
	Aroclor-1242		39.	U
	Aroclor-1248		39.	U
	Aroclor-1254		39.	U
11096-82-5	Aroclor-1260		110.	

FORM I PEST



## CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Send Report To:	Project Name (Location	ocation) Samplers: (Names) Sch. AREA 28 Scott Saudour									
Chris Torell Client Phone No: (215) 44	6-2570 + 286	PO Number		Samplers	Samplers: (Signature)						
Client Fax No: (315) 44	6-7485	100.73	.800			,	m				
AES Sample Number	C Sample Identif	lient cation & Location	Date Sampled	Time A=a.m. P=p.m.	Sampl Matrix	Comp Grab	Number of Cont's	Analysis Required			
100	NA-	65	10/10/03	10%P	Soil	X	1	LCB 8089			
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→ 1 Day □ 3 Day □ 2 Day □ 5 Day	□ Normal		EX661.		3	4	hr.	TAT			
CC Report To: Scalt Saulery BAL	FOX #	484									
Relinquished by: (Signature)			by: (Signature)					Date/Time			
Relinquished by: (Signature)		Received	for Laboratory by		hL	1	2	10/10/03 /13c			
TEMPERAT Ambient or Notes:	Chilled	Notes:	PRESERVED Y N			Note	(	WITHIN HOLDING TIMES			

#### 1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NA-71 (7.0-7.5)

Lab Name: AES Contract:

Matrix: (soil/water) SOIL

Lab Sample ID: 031021002-001

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A2526

Level: (low/med) LOW

Date Received: 10/20/03

% Moisture: not dec. 17. dec. \_\_\_ Date Extracted: 10/20/03

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/20/03

GPC Cleanup: (Y/N) N pH: 5.9 Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND

(ug/L or ug/Kg) UG/KG Q

12674-11-2Aroclor-1016	40.	U
11104-28-2Aroclor-1221	40.	U
11141-16-5Aroclor-1232	40.	U
53469-21-9Aroclor-1242	40.	U
12672-29-6Aroclor-1248	40.	U
11097-69-1Aroclor-1254	40.	U
11096-82-5Aroclor-1260	56.	

FORM I PEST

## Adirondack Environmental Services, Inc.

314 North Pearl Street Albany, New York 12207 518-434-4546/434-0891 FAX

## CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

BBL I GE	L08 FT81	Address:	723	Tompo	Jr B	١.,	54	racus	e, NT	13214		
Send Report To:  Chyis Tavell	, BBL	Project Nam	12790	Nie 28	Samplers: (Names)							
Client Phone No: 315-44 Client Fax No: 315-4	986x CESE-94	PO Number:	.73.800		Samplers	: (Signat	ure)					
AES - Sample Number		ent		Date Sampled		Samp	le Type dusp grap	Number of Cont's	Anal	ysis Required		
100	1F-AN	(7.0-	1.2.)	10/20/03	440 0	25/1	X	1	PCB	8087		
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Turnaround Time Request:  X 1 Day	F4, #		Special In	E+pe		9.	4 1	AR	TAT	7		
Scott Sauders 766-0659  Relinquished by: (Signature)			Received	by: (Signature)					Da	ite/Time		
Relinquished by: (Signature)  Temperature  Ambient or Chilled			PROPERLY PRESERVED Y				Pate/Time 10/20/03 17:42 RECEIVED WITHIN HOLDING TIMES Y N					
Notes:		Note					Note					

WHITE - Lab Copy

YELLOW - Sampler Copy

## 1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NA-77

Lab Name: AES

Contract:

Matrix: (soil/water) SOIL

Lab Sample ID: 031014010-001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: A2429

Level: (low/med) LOW

Date Received: 10/14/03

% Moisture: not dec. 13. dec. \_\_\_\_ Date Extracted: 10/14/03

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/14/03

GPC Cleanup: (Y/N) N pH: 5.9 Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

12674-11-2Aroclor-1016	38.	U
11104-28-2Aroclor-1221	38.	U
11141-16-5Aroclor-1232	38.	U
53469-21-9Aroclor-1242	38.	U
12672-29-6Aroclor-1248	38.	U
11097-69-1Aroclor-1254	38.	U
11096-82-5Aroclor-1260	10.	J

FORM I PEST



## CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:		Address:			-0.4					2012/54		
BBL clo	2E-Foeltel	673	3 T	ompath	RA		5	441	LINSE.	NY	13214	
Send Report To:		Project Name	(Location	1)	Sampl	ers:	(Names	s) .	_			
Chvis Tavel	1. BBL	GE To	effel	-Area 28	C	4	vis .	To	rell )	s flow	anders	
Client Phone No: (315)	28Ex C126-344	PO Number:								Scott Sanders		
Client Fax No: (315)	446-7485	100	.73.	600		8	52		Look	_		
AES Sample Number	CI	ient cation & Location	1	Date Sampled	Time A=a.n P=p.n	n. n.	Samp Matrix	Сотр	e of Cont's	Anal	ysis Required	
091	NA-77			10/12/03	0819	(A) P	20:1	X	1	6CB	8082	
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		1				A P		77				
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Turnaround Time Request			Special Ir	nstructions/Rema	rks							
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WHITE - Lab Copy

YELLOW - Sampler Copy

#### 1D PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NA-79(2.0-2.5)

Lab Name: AES, INC.

Contract:

Matrix: (soil/water) SOIL

Lab Sample ID: NA-79(2.0-2.5)

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 031023034-001

Level: (low/med) LOW

Date Received: 10/23/03

% Moisture: not dec. 23. dec. Date Extracted: 10/23/03

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/03

GPC Cleanup: (Y/N) N pH: 6.2 Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

12674-11-2Arochlor-1016	43.	U
11104-28-2Arochlor-1221	43.	U
11141-16-5Arochlor-1232	43.	U
53469-21-9Arochlor-1242	43.	U
12672-29-6Arochlor-1248	43.	U
11097-69-1Arochlor-1254	43.	U
11096-82-5Arochlor-1260	43.	U

FORM I PEST

#### 1D PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-46 (4.0-4.5)

Lab Name: AES, INC.

Contract:

Matrix: (soil/water) SOIL Lab Sample ID: SB-46(4.0-4.5)

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 031023034-002

Level: (low/med) LOW Date Received: 10/23/03

% Moisture: not dec. 13. dec. Date Extracted: 10/23/03

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/03

GPC Cleanup: (Y/N) N pH: 6.6 Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

12674-11-2Arochlor-1016	38.	U
11104-28-2Arochlor-1221	38.	U
11141-16-5Arochlor-1232	38.	U
53469-21-9Arochlor-1242	38.	U
12672-29-6Arochlor-1248	 38.	U
11097-69-1Arochlor-1254	38.	U
11096-82-5Arochlor-1260	36.	J

FORM I PEST



## CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:		Address:								
BBL/GE L	offe)	6193	quel ,	Me	1	RJ.		SHING	wso N	17 13214
Send Report To:		Project Name (Location	)	Sample	ers:	(Names	1	, ,		
Chris Torell	BBL	GE Laffel.	Area 28	5	50	the	29	risbri		
Client Phone No: 315 - 94	8,7230 + 98E	PO Number:		Sample	erş:	(Signati	ure)			
Client Fax No: 315-4		100.73.9	600	2	-	aks	3	that	_	
AES Sample Number	) ci	ient cation & Location	Date Sampled	Time A=a.π P=p.π		Sampl Matrix	е Туре	Number	Analy	sis Required
001		2.0-2.51)				5011	X	١	2 10 Pt - 1 2 Pt - 12	8082
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CC Report To:	Fax #		timon	ON		2B-	96	Re	smiles	
Scold Saulers	Jee-		(0)							
Relinquished by: (Signature	1	Heceived	by: (Signature)						Ua	te/Time
Relinquished by: (Signature	)	Received	for Laboratory by	()			*		/7:05	te/Time
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WHITE - Lab Conv

YELLOW - Sampler Copy

## Adirondack Environmental Services, Inc

Date: 15-Jan-04

CLIENT:

General Electric Company

Project:

Area 28

Lab Order:

030917057

Lab ID:

030917057-001

Collection Date: 9/17/2003

Client Sample ID: SA-69	Matrix: SOIL							
Analyses	Result	PQL Qual	Units	DF	Date Analyzed			
POLYCHLORINATED BIPHENYLS		SW8082	(CLP4	PEST)	Analyst: KF			
Aroclor 1016	< 170	170	μg/Kg-dry	4	9/17/2003			
Aroclor 1221	< 170	170	μg/Kg-dry	4	9/17/2003			
Arador 1232	< 170	170	µg/Kg-dry	4	9/17/2003			
Araclor 1242	< 170	170	µg/Kg-dry	4	9/17/2003			
Aroclor 1248	< 170	170	µg/Kg-dry	4	9/17/2003			
Aroclor 1254	< 170	170	μg/Kg-dry	4	9/17/2003			
Aroclor 1260	920	170	μg/Kg-dry	4	9/17/2003			

B - Analyte detected in the associated Method Blank

<sup>\* -</sup> Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range



## CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns Client Name: GE Loefel/BBL 1723 Towarth Rd Syracuse AY
Samplers: (Names) Send Report To: Aieu 28 Chris Torell ED MEYER Client Phone No: 315 446 PO Number: Samplers: (Signature) Client Fax No: 315 445 - 4141 10073 800 Sample Type Number of Cont's Grab Sample Number Sample Identification & Location Matrix Sampled P=p.m. Analysis Required 001 SA-69 Soil 1:37 8682 (P) A P A P A P A P A P A P A P A P A A P P A Turnaround Time Request: Special Instructions/Remarks X 1 Day ☐ 3 Day □ Normal ☐ 2 Day ☐ 5 Day CC Report To: Relinquished by: (Signature) Received by: (Signature) Date/Time Relinquished by: (Signature) Received for Laboratory by: PROPERLY PRESERVED **TEMPERATURE** RECEIVED WITHIN HOLDING TIMES (Chilled Ambient Notes: Notes: Notes:

WHITE - Lab Copy

YELLOW - Sampler Copy

## Adirondack Environmental Services, Inc

Date: 16-Sep-03

CLIENT: Project: General Electric Company

,

Client Sample ID: SA-85

Area 28

Lab Order:

030915026

Lab ID:

030915026-001

Collection Date: 9/15/2003

Matrix: SOIL

Analyses		Result	PQL Qual	Units	DF	Date Analyzed	
POLYCHLORINATED	BIPHENYLS		SW8082	(CLP4	PEST)	Analyst: KI	F
Arodor 1016		< 40	40	µg/Kg-dry	1	9/15/2003	
Aroclor 1221		< 40	40	µg/Kg-dry	1	9/15/2003	
Aroclor 1232		< 40	40	µg/Kg-dry	1	9/15/2003	
Arocior 1242		< 40	40	µg/Kg-dry	1	9/15/2003	
Aroclor 1248		< 40	40	µg/Kg-dry	1	9/15/2003	
Aroclor 1254		< 40	40	µg/Kg-dry	1 '	9/15/2003	
Aroclor 1260		10	40 j	μg/Kg-dry	. 1	9/15/2003	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 1 of 1



## CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:  GE LOEFFEL  Send Report To:	/BRI	Address:	h Rd. S	4/91	J 51	e X/	Y	13	214				
Send Report To: Chris Tore	11	Aven 28	ect Name (Location)			Samplers: (Names)  ED MEYER							
Client Phone No: Client Fax No:		PO Number:	Number:		Samplers: (Signature)								
AES Sample Number	Client		Date Sampled	Time A=a.m. P=p.m.		Samp Matrix	le Typ	ype quy	Number of Cont's		sis Required		
001	SA-85		9/15/03	- 1		650 - N	X	_	1	PCR	808Z		
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Relinquished by: (Signature  TEMPER  Ambient o			erly Preserved	2	-		No	tes:	RECEIVED	0/ -	3: 24 NG TIMES		
			TV								- 10 (10 (10 (10 (10 (10 (10 (10 (10 (10		

WHITE - Lab Copy

YELLOW - Sampler Copy



## Adirondack Environmental Services, Inc

Date: 16-Sep-03

CLIENT:

General Electric Company

Project:

GE Loeffel Area 28

Lab Order:

030915018

Lab ID:

030915018-001

Collection Date: 9/15/2003

Client Sample ID: SA-90		* 11 1	Matrix	: SOIL		
Analyses	Result	PQL Qual	Units	DF	Date Analyzed	
POLYCHLORINATED BIPHENYLS		SW8082	(CLP4_P	EST)	Analyst: KF	
Arodor 1016	< 42	42	μg/Kg-dry	1	9/15/2003	
Arodor 1221	< 42	42	μg/Kg-dry	1	9/15/2003	
Arodor 1232	< 42	42	μg/Kg-dry	1	9/15/2003	
Arodor 1242	< 42	42	μg/Kg-dry	1	9/15/2003	
Aroclor 1248	< 42	42	µg/Kg-dry	1	9/15/2003	
Aroclor 1254	< 42	42	µg/Kg-dry	1	9/15/2003	
Aroclor 1260	680	42	μg/Kg-dry	1	9/15/2003	

B - Analyte detected in the associated Method Blank

<sup>\* -</sup> Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range



## CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Address:

Client Name: GELOFFEL /BBL	Address:	the Rd. S	Note Park	e AJ	V 13	714				
Send Report To:	Project Name (Locatio	in)	Samplers: (Names)							
Chris Torell	Ava. 28		ED Meyer Samplers: (Signature)							
Client Phone No: (317) 446-2570 x 25	PO Number:		Sampler	s: (Signat	ture)		7			
Client Fax No: (315) 445-9161	100,73,860	100 73 860		5 th	7 /	-				
AES	Client entification & Location	Date Sampled	Time A=a.m. P=p.m.	Matrix	le Type	Number of Cont's				
- A2 100	No. 4 Personal new	9/15/03	16:45 P	1.02	X	ı		8082		
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Turnaround Time Request:		pstructions/Rema	irks		_	_				
M 1 Day □ 3 Day □ Normal □ 2 Day □ 5 Day		24 N	nv. T	AT		)				
Chris Torell						/				
Relinquished by: (Signature)	Received	by: (Signature)					D	ate/Time		
Relinquished by: (Signature)	Received	for Laboratory b	M.	4	0		9/15	atg/Time /2 3 C		
Ambient or Chilled Notes:	Notes:	PEBLY PRESERVED			Notes	(	WITHIN HOL			

WHITE - Lab Copy

YELLOW - Sampler Copy

## rondack Environmental Services, Inc

Date: 11-Sep-03

LIENT:

General Electric Company

Project:

GE Loeffel Area 28

Lab Order:

030910032

Lab ID:

030910032-001

Collection Date: 9/10/2003

Matrix: SOIL									
Result	PQL Qual	Units	DF Date Analyzed						
	SW8082	(CLP4_PES	Analyst: KF						
< 43	43	μg/Kg-dry	1 9/10/2003						
< 43	. 43	μg/Kg-dry	1 9/10/2003						
< 43	43	µg/Kg-dry	1 9/10/2003						
< 43	43	µg/Kg-dry	1 9/10/2003						
< 43	43	µg/Kg-dry	1 9/10/2003						
<43 .	43	µg/Kg-dry	1 9/10/2003						
180	43	µg/Kg-dry	1 9/10/2003						
	<43 <43 <43 <43 <43 <43	SW8082 <43 43 <43 43 <43 43 <43 43 <43 43 <43 43 <43 43	Result PQL Qual Units  SW8082 (CLP4_PES  <43						

J - Analyte detected below quantitation limits :

B - Analyte detected in the associated Method Blank

<sup>\* -</sup> Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range



## CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: Address:													
BBL, Inc.		6.193	6723 lompall			L Rd. Box 66 Syrucure Nt 11							
Send Report To:		Project Name (Locatio	on)	Samplers: (Names)									
Chris Torell	, BBL	CE Poettel	SE Loeffel Area 28			44	Sav	ders					
Client Phone No: (315)44	16-3570 x 286-31	PO Number:				(Signat		De Zirin					
Chris Tovell Client Phone No: (315) 44 Client Fax No: (315) 4	46-7485	100.73.8	00	2	3	20	-	when					
AES Sample Number	CI	ent eation & Location	Date		Time A=a.m. P=p.m.		e Type	Number of Cont's	Analysis Required				
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		the state of the s			Α	P-1017		1 - 12					
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Turnaround Time Request:		Special I	nstructions/Rema	rks			75	4					
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□ 2 Day □ 5 Day			34 h	IVO	3	7	M						
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CC Report To:													
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Relinquished by: (Signature)		Received	for Laboratory by	:)				7.5	0/.1	Date/Time			
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WHITE - Lab Copy

YELLOW - Sampler Copy

# Appendix D

# Water Treatment Laboratory Analytical Results



## Adirondack Environmental Services, Inc

Date: 08-Oct-03

CLIENT:

General Electric Company

Lab Order:

031006036

Project:

Lab ID: 031006036-001 Collection Date: 10/6/2003

Client Sample ID: Frac Tank FT-1

Matrix: WATER

Client Sample ID: Frac Tank F1-1	Matrix: WATER									
Analyses	Result	PQL Qual	Units	DF	Date Analyzed					
PCBS IN WATER		E608	(E608)		Analyst: KF					
Aroclor 1016	< 0.068	0.068	μg/L	1	10/6/2003					
Aroclor 1221	< 0.068	0.068	μg/L	1	10/6/2003					
Aroclor 1232	< 0.068	0.068	µg/L	1	10/6/2003					
Aroclor 1242	< 0.068	0.068	μg/L	1	10/6/2003					
Aroclor 1248	< 0.068	0.068	µg/L	1	10/6/2003					
Aroclor 1254	< 0.068	0.068	μg/L	1	10/6/2003					
Aroclor 1260	< 0.068	0.068	µg/L	1	10/6/2003					
OIL AND GREASE		E1664			Analyst: MC					
Oil & Grease	< 1.0	1.0	mg/L	1	10/8/2003					
PH		E150.1			Analyst: KS					
рН	9.7	1.0	pH Units	1	10/6/2003					
TOTAL SUSPENDED SOLIDS		E160.2			Analyst: PL					
TSS (Residue, Non-Filterable)	7.0	. 1.0	mg/L	1	10/6/2003					

R - RPD outside accepted recovery limits

E - Value above quantitation range



#### CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

					- 1				2 1	15
GE WARREN -	She Env	552 A	is 5+ 6	loche	016	n n	14		140	1)
Send Report To:		Project Name (Locat	ion)	Samp						
Keith Hambley		G& 1 Wassau		Samplers: (Names) Sture Sto						monter
Client Phone No: 585 -	865-5020	PO Number:		Samp	lers:	(Signati	ure)	l.j.	11	A1.7
Client Phone No: 585 - Client Fax No: 585	865-5095					M	1	WA	ri from	
AES Sample Number	Clie Sample Identific		Date Sampled	Time A=a.m. P=p.m.		Sampl Matrix	문	e quap	Number of Cont's	Analysis Required
001 4	FIRE Tank	FT-1	10/6/08	11 <sup>x</sup>		July -		X	1	PCBs (MDL) 60
	Fine Tank		10/6/03		A (P)	Profee		×	1	oil & Grease
	fine Tank		10/6/08							PH
	Frac Tank	F7-1	10/6/08	177	A (P)	Hype		K	-	Suspended Solids
					P					
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		12			P					
Turnaround Time Request:  1 Day 3 Day 2 Day 5 Day CC Report To: Steve @ SL@ Tro			Instructions/Rema	rks						
Relinguished by: (Signature)	7	Receive	ed by: (Signature)							Date/Time 10]3/2 253/m
Relinquished by: (Signature)			d for Laboratory by							Date/Time 10/0/03 3:00pm
Temperate	URE		OPERLY PRESERVED					ı		WITHIN HOLDING TIMES
Ambient or Notes:	Chilled		Y N				No	tes:		Y) N
							-			

WHITE - Lab Copy

YELLOW - Sampler Copy

Date: 10-Oct-03

CLIENT: Project:

General Electric Company

GE/Nassau

Lab Order:

031010015

Lab ID:

031010015-001

Collection Date: 10/10/2003

Client Sample ID: FT-1A-Frac Tank

Matrix: WATER

Analyses

Result

PQL Qual Units

DF

Date Analyzed

Analyst: SH

PH pH

8.5

E150.1

1.0

pH Units

10/10/2003

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range



Client Name:

#### 314 North Pearl Street Albany, New York 12207 518-434-4546/434-0891 FAX

# CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

GE - She	port To:  Project Name (Location)  Fe - Massium  None No: \$ 3 865-5020 PO Number: Sam						Samplers: (Names)							
Send Report 10:	st. w	1-G - Mass	recher.	Samplers: (Names) Steel Stock months										
Client Phone No:	7 1 825-6026	PO Number:		Samp	implers: (Signature)									
Client Fax No:	- 865-1015													
203						Sampl	Sample Type Numbe							
AES Sample Number	Sample Identi	Client Vication & Location	Date Sampled	A=a.m. P=p.m.		Matrix B & &		Grab	of Cont's	Analysis Required				
001	A1-73		10/10/03	9 6	A	Under		X	14.04	(H				
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Ambient or Chilled  Notes: Notes:			PROPERLY PRESERVED Y N	)	_		RECEIVED WITHIN HOLDING TIMES  Y N Notes:							
	HTF. Lob Com-	VELL			_				HILL C					

WHITE - Lab Copy

YELLOW - Sampler Copy

Date: 30-Oct-03

CLIENT: Project:

pH

TOTAL SUSPENDED SOLIDS

TSS (Residue, Non-Filterable)

General Electric Company

GE-Nassau

Lab Order:

031028016

10/28/2003

10/29/2003

Analyst: RC

Lab ID:	031028016-001			Collection Date:	10/28/	2003			
Client Sample ID:	FT2-Frac Tank			Matrix: WATE					
Analyses		Result	PQL Qual	Units	DF	Date Analyzed			
PCBS IN WATER			E608	(E608)		Analyst: KF			
Aroclor 1016		< 0.065	0.065	μg/L	1	10/28/2003			
Aroclor 1221		< 0.065	0.065	μg/L	1	10/28/2003			
Aroclor 1232		< 0.065	0.065	μg/L	1	10/28/2003			
Aroclor 1242		< 0.065	0.065	μg/L	1	10/28/2003			
Aroclor 1248		< 0.065	0.065	μg/L	1	10/28/2003			
Aroclor 1254		< 0.065	0.065	μg/L	1	10/28/2003			
Aroclor 1260		0.080	0.065	μg/L	1	10/28/2003			
OIL AND GREASE			E1664			Analyst: RC			
Oil & Grease		< 1.0	1.0	mg/L	1	10/29/2003			
PH			E150.1			Analyst: LS			

1.0

1.0

E160.2

pH Units

mg/L

8.4

3.5

R - RPD outside accepted recovery limits



#### CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address: 552 Avis	0 0	.1.	1		N								
Gelsho Send Report To:		SJ C. (1VI)	DT DEC	Samo	Te	(Names	mes)							
Krith Hism	Olety	(-9 - 11) and	NZI II	Camp	4.	when	^	(	· he	ex mand in				
Send Report To:  Verth Himm  Client Phone No:  Client Fax No:	845020	PO Number:	er: Samp			Samplers: (Names) Stock mode Samplers: (Signature)								
CHEIR FAX NO.	863 - 3093					Sampl	A	W	lumber	1 Western				
AES Sample Number	C	lient cation & Location	Date Sampled	A=a.r P=p.r	m.	Matrix	Comp	Grab	of Cont's	Analysis Required				
001	FT2 - 1	Frag Tank	10/28/03	10%	P P	Waler		X	3	PCBs				
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☐ 1 Day ☐ 3 Da														
CC Report To:	8-766-74	22												
Relinquished by: (Signatur		by: (Signature)							Date/Time 15/28/03-					
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Ambient o	Notes:	() N		_		Not	es:_		(¥) N					
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WHITE - Lab Copy

YELLOW - Sampler Copy

Date: 03-Nov-03

CLIENT:

General Electric Company

Project:

GE-Nassau

Lab Order:

031031009

Lab ID:

031031009-001

Collection Date: 10/31/2003

Client Sample ID: FT2A-Frac Tank

Matrix: WATER

Circuit Dunipie LDT						
Analyses	Result	PQL Qua	l Units	DF	Date Analyzed  Analyst: KF	
PCBS IN WATER		E608	(E608)			
Aroclor 1016	< 0.065	0.065	μg/L	1	10/31/2003	
Aroclor 1221	< 0.065	0.065	μg/L	1	10/31/2003	
Aroclor 1232	< 0.065	0.065	μg/L	1	10/31/2003	
Aroclor 1242	< 0.065	0.065	μg/L	1	10/31/2003	
Aroclor 1248	< 0.065	0.065	μg/L	1	10/31/2003	
Aroclor 1254	< 0.065	0.065	μg/L	1	10/31/2003	
Aroclor 1260	< 0.065	0.065	μg/L	1	10/31/2003	

R - RPD outside accepted recovery limits



# CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:		Address:	(1 0	1	1	A 111		
	nJ	552 Au	57+ W	ochen	APA	WA		
Send Report To:	. / .	Project Name (Locatio	n)	Sampler	s: (Names	s) ;		0111
Keith tiAn	191ey	GE- Nas	er: Samplers: (Si			enha	Stockmarter	
	- 812/2010	PO Number:	imber:			ure)	V	1 1
Client Fax No: 585	- 865-595				I	*	Am	VINDAY
AES Sample Number	C Sample Identifi	lient cation & Location	Date Sampled	Time A=a.m. P=p.m.	Matrix	le Type	Number of Cont's	Analysis Required
001	FT2A - F	V . L sa.	10/31/03	130 P	Link	X	A	Pabo
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□ 2 Day □ 5 Da	y 24 HRS							
CC Report To:	7-766-74	2_						
Reljóguished by: (Sjønatur			by: (Signature)					Date/Time
NA MOTO								10/31/03 8:50Am
Refinquished by: (Signatur	re)	Received	for Laboratory b		1			10/31/03 850
Темре	PRO	PERLY PRESERVED	)	-		RECEIVE	D WITHIN HOLDING TIMES	
Ambient or Chilled			Y) N					Y N
Notes:		Notes:				Notes	8:	
					-			
WHI	ITE - Lab Copy	YELLON	V - Sampler Conv				INK - Co	enerator Conv

Date: 13-Nov-03

CLIENT: 031112025 General Electric Company Lab Order: GE/Nassau Project: Collection Date: 11/12/2003 Lab ID: 031112025-001 Client Sample ID: Frac Tank-FT-3 Matrix: WATER POL Qual Units DF Date Analyzed Result Anaivees Analyst: KF RESTR (E608) PCBS IN WATER 11/12/2003 < 0.085 0.065 Araciar 1016 perf. 11/12/2003 < 0.085 0.065 MOL. Arucha 1221 < 0.065 0.000 PUIL 11/12/2003 Arodlor 1232 11/12/2003 < 0.065 0.065 ug/L Aroclor 1242

Arodor 1248	< 0.085	0.086	μgAL	- 1	11/12/2003
Audicior 1254	< 0.065	0.085	yg/L	1	11/12/2003
Aroclor 1280	0.237	0.066	µg/L	î	11/12/2003
OIL AND GREASE		E1664			Analyst: RC
Oil & Grease	< 1.0	1.0	mg/L	1	11/12/2002
рн		E150.1	1		Analyst: PL
рН	8.5	1.0	pH Units	1	11/12/2003
TOTAL SUSPENDED SOLIDS		E160.3	2		Analyst: RC
TSS (Residue, Non-Filterable)	4.0	1.0	mg/L	1	11/12/2003

I - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

<sup>\* -</sup> Value exceeds Maximum Contaminant Lord

R - RPD outside accepted recovery limits

E - Value above quantitation range



# CHAIN OF CUSTODY RECORD

Adirondack
Invironmental Services, Inc.

314 North Pearl Street Albany, New York 12207 518-434-4546/434-0891 FAX

A full service analytical research laboratory offering solutions to environmental concerns

Cilient Name:		Address:	Avis St	- 0/	chest	71	N	7		
Send Report To:	Her	Project Name (Local	ion) ))au	Samplers	(Names)		Sta	Kmente		
Client Phone No: 547 Client Fax No: 545	- 865-5020	PO Number:		Samplers: (Stylinghure)						
AES Sample Number	CII Sampie Identific	eni ation & Location	Date Sampled	A=e.m. P=p.m.	Name and Address of the Owner, where the Owner, which the	Grap Grab	Number of Cont's	Analysis Required		
001	Fractunk -	FT:3	11/12/03	P A	علمها	1	3	GCO PH HOUSE - SPIT		
	221112	225	)	P		+				
	031112	025		A P		+		Superced Soilds		
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		- 4		P A		-				
			-	P A P						
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	,.			A P						
			1	A						
Turnaround Time Request:  X 1 Day			Instructions/Rema	irks						
Relinguished by: (Signatur	100 111	Receive	ed by: (Signature)					Date/Time		
Refinquished by: (Signatur TEMPE) Ambient Notes:		,	ROPERLY PRESERVED		2			Date/Time  11/12/03 10 A-  Date/Time  Within Holding Times  N		

WHITE - Lab Copy

YELLOW - Sampler Copy

Date: 17-Nov-03

CLIENT: Project:

General Electric Company

GE-Nassau

Lab Order:

031114003

Lab ID:

031114003-001

Collection Date: 11/14/2003

Client Sample ID: Frac Tank-FT3A

Matrix: WATER

Analyses	Result	PQL Qua	l Units	DF	Date Analyzed  Analyst: KF	
PCBS IN WATER		E608	(E608)			
Aroclor 1016	< 0.065	0.065	μg/L	1	11/14/2003	
Aroclor 1221	< 0.065	0.065	μg/L	1	11/14/2003	
Aroclor 1232	< 0.065	0.065	μg/L	1	11/14/2003	
Aroclor 1242	< 0.065	0.065	µg/L	1	11/14/2003	
Aroclor 1248	< 0.065	0.065	μg/L	1	11/14/2003	
Aroclor 1254	< 0.065	0.065	μg/L	1	11/14/2003	
Aroclor 1260	< 0.065	0.065	μg/L	1	11/14/2003	

R - RPD outside accepted recovery limits



#### CHAIN OF CUSTODY RECORD

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Client Fax No:							
Send Report To:  Visit Collect Name (Location)  Samplers: (Name)  Samplers: (Signature)  FO Number:  Sample Name No:  A A P No:  A A No:  A A P No:  A A No:  A A P No:  A A No:  A A P No:  A A No:  A A P No:  A A							
Client Fax No:   10   10   10   10   10   10   10   1	Samplers: (Names)						
Client Fax No:   10   10   10   10   10   10   10   1							
ALS Sample Number   Sample Identification & Location   Date Sample   App.   Namber							
ALS Sample Number   Sample Identification & Location   Date Sample   App.   Namber							
A   P   A   P   A   P   A   P   A   P   A   P   A   P   A   P   A   P   A   P   A   P   A   P   A   P   A   P   A   P   A   P   A   A							
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Turnaround Time Request:    A   P     A   P							
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Turnaround Time Request:    1 Day							
Turnaround Time Request:    1 Day							
Turnaround Time Request:    Day   3 Day   Normal							
Turnaround Time Request:    1 Day							
Turnaround Time Request:    1 Day							
1 Day 3 Day Normal 2 Day 5 Day  CC Report To:  5 18 - 766 - 7422							
1 Day 3 Day Normal 2 Day 5 Day  CC Report To:  5 18 - 766 - 7422							
CC Report To:  Stere @ 518-766-7422							
CC Report To: Steve @ 518-766-7422							
Stere @ 518-766-7422							
Stere @ 518-766-7422							
Date/fille							
11/4/2							
11.11.	3)						
Received for Laboratory by:    Date/Time	745						
	-17						
TEMPERATURE PROPERLY PRESERVED RECEIVED WITHIN HOLDING TIMES							
Ambient or (Chilled) (Y) N (Y) N							
Notes: Notes: Notes:							
WHITE - I sh Conv. YELLOW - Sampler Conv. PINK - Congrator Conv.							

Date: 04-Dec-03

CLIENT: Project:

General Electric Company

GE/Nassau

Lab Order:

031203016

Lab ID:

031203016-001

Collection Date: 12/3/2003

Client Sample ID: FT4-Frac Tank		Matrix: WATER									
Analyses	Result	PQL Qua	l Units	DF	Date Analyzed						
PCBS IN WATER		E608	(E608)		Analyst: KF						
Aroclor 1016	< 0.079	0.079	µg/L	1	12/3/2003						
Aroclor 1221	< 0.079	0.079	μg/L	1	12/3/2003						
Aroclor 1232	< 0.079	0.079	μg/L	1	12/3/2003						
Aroclor 1242	< 0.079	0.079	μg/L	1	12/3/2003						
Aroclor 1248	< 0.079	0.079	μg/L	1	12/3/2003						
Aroclor 1254	< 0.079	0.079	μg/L	1	12/3/2003						
Aroclor 1260	0.144	0.079	μg/L	1	12/3/2003						
OIL AND GREASE		E1664			Analyst: RC						
Oil & Grease	< 1.0	1.0	mg/L	1	12/3/2003						
PH		E150.1			Analyst: LS						
pH	8.4	1.0	pH Units	1	12/3/2003						
TOTAL SUSPENDED SOLIDS		E160.2			Analyst: RC						
TSS (Residue, Non-Filterable)	9.5	1.0	mg/L	1	12/3/2003						

R - RPD outside accepted recovery limits



# CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	GE-31C				Rod	(190)	Ner	N				
Send Report To:	mbley	Project Nam	e (Location) ) anneac		Samp	lers:	(Names	nes)				
Client Phone No: 745 Client Fax No: 54	5-815-5095	PO Number:	13.7			amplers: (Signature)						
AES Sample Number	C Sample Identif	Client entification & Location		Date n Sampled		e m. m.	Sampl Matrix	e Type	Numb of Cont			
001	FT4 6	28 /200	Κ	12/3/69	60	P	),ÅE	)	3	RCBs, PH		
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	0312030	16		)		A P				( w		
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Turnaround Time Request	:		Special Ins	tructions/Rema	arks	r						
⊠ 1 Day □ 3 D	ay 🗆 Normal											
□ 2 Day □ 5 D	ay											
CC Report To: Steve @ 5	18-766-7	422										
Relinguished by: (Signatu			Received b	y: (Signature)						Date/Time		
Rélinquished by: (Signatu	ire)		Received fo	r Laboratory b	y: M-X	5	l.			Date/Time		
TEMPERATURE Ambient or Chilled			PROPE (Y	RLY PRESERVED	)			RECEIVED WITHIN HOLDING TIMES  Y N				
Notes:	٠ 4.	Notes	74.					Notes:				
		-						_				

WHITE - Lab Copy

YELLOW - Sampler Copy

Date: 09-Dec-03

CLIENT: Project:

General Electric Company

GE-Nassau

Lab Order:

031209005

Lab ID:

031209005-001

Collection Date: 12/9/2003

Client Sample ID: Frac Tank-FT4A

Matrix: WATER

Analyses	Result	PQL Qua	l Units	DF	Date Analyzed	
PCBS IN WATER		E608	(E608)		Analyst: KF	
Aroclor 1016	< 0.065	0.065	µg/L	1	12/9/2003	
Aroclor 1221	< 0.065	0.065	µg/L	1	12/9/2003	
Aroclor 1232	< 0.065	0.065	μg/L	1	12/9/2003	
Aroclor 1242	< 0.065	0.065	μg/L	1	12/9/2003	
Aroclor 1248	< 0.065	0.065	µg/L	1	12/9/2003	
Aroclor 1254	< 0.065	0.065	μg/L	1	12/9/2003	
Aroclor 1260	0.099	0.065	µg/L	1	12/9/2003	



# CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:		Address:  5 7 2 Au 5 5 Rochest in  Project Name (Location) Sampler				0	14/			
Send Report To:	/	Project Name (Loca	ation)	Samp	lers:	(Names	;)	5	Leck.	maitor
Client Phone No: 535	869-5020	PO Number:		Samp	lers:	(Signati	ure)		18	Luganyana Kanad
AES Sample Number	CI	ient cation & Location	Date Sampled	Tim A=a.i P=p.i	m.	Sampl Matrix	e Type	Grab	Number of Cont's	Analysis Required
001	Fraz Tank	F 7 4 F4	12/4/18	46	P	LANGE		X		NCC,
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Turnaround Time Request:  1 Day 3 Day 2 Day 5 Day  CC Report To:	× + 166-742	22	al Instructions/Rema	arks						
Relinquished by: (Signature	16	Recei	ved by: (Signature)							Date/Time
Relinquished by: (Signature TEMPER Ambient o			PROPERLY PRESERVED Y N	16-7	6	1	Not			Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time
	٥						_			

WHITE - Lab Copy

YELLOW - Sampler Copy

Date: 11-Dec-03

CLIENT:

General Electric Company

Project:

GE-Nassau

Lab Order:

031210053

Lab ID:

Client Sample ID: Frac Tank-FT4B

031210053-001

Collection Date: 12/10/2003

Matrix: WATER

•							
Analyses	Result	PQL Qua	al Units	DF	Date Analyzed		
PCBS IN WATER		E608	(E608)		Analyst: KF		
Aroclor 1016	< 0.065	0.065	μg/L	1	12/10/2003		
Aroclor 1221	< 0.065	0.065	μg/L	1	12/10/2003		
Aroclor 1232	< 0.065	0.065	μg/L	1	12/10/2003		
Aroclor 1242	< 0.065	0.065	μg/L	1	12/10/2003		
Aroclor 1248	< 0.065	0.065	μg/L	1	12/10/2003		
Aroclor 1254	< 0.065	0.065	μg/L	1	12/10/2003		
Aroclor 1260	0.068	0.065	µg/L	1	12/10/2003		
			110000				

R - RPD outside accepted recovery limits



# CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:		Address:	Address:						
Send Report To:	f	Project Name	(Location)	A harmon	Samplers	(Name:	s)	51	eckmanter.
Client Phone No:	867-1070 - 861-1191	PO Number:			Samplers	: (Signat	ure)	and the same	man and and and
AES Sample Number		Client lication & Location		Date Sampled	Time A=a.m. P=p.m.	Time Sample Type Number A=a.m. P=p.m. Matrix 5 5 Cont's			Analysis Required
601	Erro Cara	F1-16		2/19/6	30 A	Wite	X	1	PEGI
				, , ,	A P				
		The Control of the Co			A P				
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Turnaround Time Request:		S	pecial Inst	ructions/Rema					
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2 Day	ау								
Steak S187	766-7422	7							
Relinquished by: (Signatur	e)	R	eceived by	r: (Signature)					Date/Time
Relinquished by: (Signatur	e)	Re	eceived fo	r Laboratory by	r:		0		Date/Time 344
TEMPEI Ambient (	RATURE OF Chilled	Notes:_	PROPE	RLY PRESERVED			Notes	(	WITHIN HOLDING TIMES
	1								

WHITE - Lab Copy

YELLOW - Sampler Copy

# Appendix E

# **Equipment Wipe Sampling Laboratory Analytical Results**



CLIENT: General Electric Company

Project: GE-Nassau

Lab ID: 031002015-001 Collection Date: 10/2/2003

Client Sample ID: Skid Steer #1-BL Matrix: WIPE

트리트 (1985-1984) HE NEW 1987 (1985-1987) HE					
Analyses	Result	PQL Qual	Units	DF	Date Analyzed
PCBS		SW8082	(SW8082)		Analyst: KF
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	10/2/2003
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	10/2/2003
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	10/2/2003
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	10/2/2003
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	10/2/2003
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	10/2/2003
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	10/2/2003

Lab ID: 031002015-002 Collection Date: 10/2/2003

Client Sample ID: Skid Steer #2-BR

Analyses	Result	PQL Qual	Units	DF	Date Analyzed  Analyst: KF				
PCBS		SW8082	(SW8082)						
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	10/2/2003				
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	10/2/2003				
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	10/2/2003				
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	10/2/2003				
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	10/2/2003				
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	10/2/2003				
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	10/2/2003				

Lab ID: 031002015-003 Collection Date: 10/2/2003

Client Sample ID: Skid Steer#3-Trac Matrix: WIPE

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
PCBS		SW8082	(SW8082	2)	Analyst: KF
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	10/2/2003
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	10/2/2003
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	10/2/2003
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	10/2/2003
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	10/2/2003
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	10/2/2003
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	10/2/2003

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

Date: 08-Oct-03

Lab Order:

Matrix: WIPE

031002015

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

\* - Value exceeds Maximum Contaminant Level

Page 1 of 1



# CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:		Address:			_		1		
SLC Roches	ter	552 F	luis 5	1 9	20	ches	ter	h	tockmaster
0 10 17		Project Name (Location	)	Sampl	ers:	(Names)	1		- 1 -
Client Phone No: 585	mbleu	GE-Nasso	u			St	teve	- 5	tockmarter
Client Phone No: 585	865+5020	PO Number:		Sampl	ers:	(Signatur	e)	11/	/
Client Fax No: 585-	865-5095					14	1	Linha	d.
AES Sample Number		ient cation & Location	Date Sampled	A=a.n P=p.n	n.	Sample Matrix	Type grag	Number of Cont's	Analysis Required
001	Skid Steer +	41 - BL	10/2/03	7:30	Ø P	سمند		1	PCBs
002	Skil Steer	#2-BR	10/2/03	7:35	<b>6</b> ₽	Wipe		١	PCB,
003	Skid Ster	1-BL 12-BR x13-Trac	10/2/03	7:40	Ø P	Mile		1	PCBs PCBs
t					A P				
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					Р				
Turnaround Time Request:		Special In	structions/Rema	rks					
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2 Day 5 Da	ıy								
CC Report To:		Δ4×2							
SLC C 518-7	166-7422 /FAX	AHNStove							
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Tominquisited by, (originatur	6)	nyceiveu	/ Laboratory by	46		P			10/2/3 95-J
Темрег	RATURE	PROF	PRESERVED			/		RECEIVED	WITHIN HOLDING TIMES
Ambient	or Chilled		) N					(	Y ) N
Notes:		Notes:					Notes	:	
					-		-		
					_				

WHITE - Lab Copy

YELLOW - Sampler Copy

PINK - Generator Copy

6178

Date: 22-Oct-03

CLIENT: Project:

General Electric Company

GE-Nassau

Lab Order:

031017046

Lab ID:

031017046-001

Collection Date: 10/17/2003

Client Sample ID: Fractank-48-WS1

Matrix: WIPE

Citette Cumpie ID: Tructum to trus							
Analyses	Result	PQL Qual	Units	DF	Date Analyzed		
PCBS		SW8082	(SW8082)		Analyst: KF		
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	10/18/2003		
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	10/18/2003		
Araclar 1232	< 1.0	1.0	ug/100cm2	1	10/18/2003		
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	10/18/2003		
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	10/18/2003		
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	10/18/2003		
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	10/18/2003		

Lab ID:

031017046-002

Collection Date: 10/17/2003

Client Sample ID: Fractank-48-WS2

Matrix: WIPE

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
PCBS		SW8082	(SW8082)		Analyst: KF
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	10/18/2003
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	10/18/2003
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	10/18/2003
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	10/18/2003
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	10/18/2003
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	10/18/2003
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	10/18/2003

R - RPD outside accepted recovery limits

E - Value above quantitation range

314 North Pearl Street Albany, New York 12207 518-434-4546/434-0891 FAX

# CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	nuiconmobel	Address:	St To	chart	er N	/		
Client Name:  GE SLC E  Send Report To:  Keith HAM  Client Phone No: 585  Client Fax No: 755	nbley	552 Avis Project Name (Location) GE - Nasse	au	Sample	rs: (Names) epike rs: (Signatu	7 n	Sto	Kmarter
Client Phone No: 5%5	-865-5020	O Number:		Sampler	s: Signatu	104	1	
AES Sample Number	Clier Sample Identificat	ion & Location	Date Sampled	Tiple Ara.m. P=p.m.	Sample Matrix	Grab	Number of Cont's	Analysis Required
001	Fracture - 4/8	7 - WS 1	10/17/03	1:18	Wire	×	l	PCB
002	Fractank - 48	r- W32	10/17/03	715	wipe	X	1	PCB
		*		F		$\perp$		
		5		F				
		. Al		P				
(	0310170	46		P				
				P				
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				Р				
Turnaround Time Request:	v 🗆 Normal	Special Ins	structions/Remar	rks				
□ 2 Day □ 5 Da								
CC Report To:	766-7422							
Relinquished by: (Signatur	e)	Received b	y: (Signature)		2			Date/Time
Relinquished by: (Signature			Laboratory by	61	1			10/17/03 135 pm
TEMPER Ambient o		PROPE	PRESERVED N			F		WITHIN HOLDING TIMES  N
Notes:		Notes:				Notes:		

WHITE - Lab Copy

YELLOW - Sampler Copy

Date: 28-Oct-03

CLIENT:

General Electric Company

Project:

GE-Nassau

Lab Order:

031027021

Lab ID:

031027021-001

Collection Date: 10/27/2003

Client Sample ID: Dunp Box Bottom #1

Matrix: WIPE

Analyses	Result	PQL Qual	Units	DF	Date Analyzed	
PCBS		SW8082	(SW8082	2)	Analyst: KF	
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	10/27/2003	

Lab ID:

031027021-002

Collection Date: 10/27/2003

Client Sample ID: Left Front Tite #2

Matrix: WIPE

Analyses	Result	PQL Qual	Units	DF	Date Analyzed	
PCBS		SW8082	(SW8082	2)	Analyst: KF	
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	10/27/2003	

Lab ID:

031027021-003

Client Sample ID: Box Gate #3

Collection Date: 10/27/2003

Matrix: WIPE

Analyses	Result	PQL Qual	Units	DF	Date Analyzed	
PCBS	SW80		(SW8082	2)	Analyst: KF	
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	10/27/2003	
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	10/27/2003	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Date: 28-Oct-03

CLIENT: Project:

General Electric Company

GE-Nassau

Lab Order:

031027021

Lab ID:

031027021-004

Collection Date: 10/27/2003

Client Sample ID: RT Rear Tire #4		Matrix: WIPE							
Analyses	Result	PQL Qual	Units	DF	Date Analyzed				
PCBS		SW8082	(SW8082	)	Analyst: KF				
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	10/27/2003				
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	10/27/2003				
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	10/27/2003				
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	10/27/2003				
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	10/27/2003				
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	10/27/2003				
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	10/27/2003				

R - RPD outside accepted recovery limits



314 North Pearl Street Albany, New York 12207

### CHAIN OF CUSTODY RECORD

518-434-4546/434-0891 FAX A full service analytical research laboratory offering solutions to environmental concerns Client Name: GE/948 Send Report To: Project Name (Location) Samplers: (Names) 6E Wassau Keith PO Number: Client Phone No: Samplers: (Signature) Client Fax No: Time/ Sample Type Number Client Sample Identification & Location of Cont's Date A=a.m. Grab Comp Matrix Sample Number Sampled P=p.m. Analysis Required 10300 Wire 001 1650 00 Wife 002 003 004 P A P A P A 03102702 P Α P А P Α P A P A Р A Turnaround Time Request: Special Instructions/Remarks □ 1 Day ☐ 3 Day □ Normal 2 Day ☐ 5 Day CC Report To: Relinquished by: (Signature) Received by: (Signature) Date/Time Relinquished by: (Signature) Received for Laboratory by: TEMPERATURE PROPERTY, PRESERVED RECEIVED-WITHIN HOLDING TIMES Ambient Chilled Notes Notes: Notes:

WHITE - Lab Copy

YELLOW - Sampler Copy

Date: 14-Nov-03

CLIENT:

General Electric Company

Project:

GE-Nassau

Lab Order:

031113009

Lab ID:

031113009-001

Collection Date: 11/13/2003

Client Sample ID: 325-Right Track

Matrix: WIPE

Analyses	Result	PQL Qual	Units	DF	Date Analyzed			
PCBS		SW8082	(SW8082)		Analyst: KF			
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	11/13/2003			
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	11/13/2003			
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	11/13/2003			
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	11/13/2003			
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	11/13/2003			
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	11/13/2003			
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	11/13/2003			

Lab ID:

031113009-002

Collection Date: 11/13/2003

Client Sample ID: 325-Left Track

Matrix: WIPE

Analyses	Result	PQL Qual	Units	DF	Date Analyzed  Analyst: KF	
PCBS		SW8082	(SW8082	2)		
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	11/13/2003	
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	11/13/2003	
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	11/13/2003	
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	11/13/2003	
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	11/13/2003	
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	11/13/2003	
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	11/13/2003	

Lab ID:

031113009-003

Collection Date: 11/13/2003

Matrix: WIPE

Client Sample ID: 325-Bucket/In

Analyses Result PQL Qual Units DF Date Analyzed **PCBS** SW8082 (SW8082) Analyst: KF

Aroclor 1016 < 1.0 1.0 ug/100cm2 11/13/2003 Aroclor 1221 < 1.0 ug/100cm2 1.0 1 11/13/2003 ug/100cm2 Aroclor 1232 < 1.0 1.0 1 11/13/2003 Aroclor 1242 < 1.0 1.0 ug/100cm2 11/13/2003 Aroclor 1248 < 1.0 1.0 ug/100cm2 1 11/13/2003 Aroclor 1254 < 1.0 1.0 ug/100cm2 11/13/2003 1 Aroclor 1260 < 1.0 1.0 ug/100cm2 11/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Date: 14-Nov-03

CLIENT: Project: General Electric Company

GE-Nassau

Lab Order:

031113009

Lab ID:

031113009-004

Collection Date: 11/13/2003

Matrix WIPF

Dooule					
Result	PQL Qual	Units	DF	Date Analyzed	
	SW8082	(SW8082	)	Analyst: KF	
< 1.0	1.0	ug/100cm2	1	11/13/2003	
< 1.0	1.0	ug/100cm2	1	11/13/2003	
< 1.0	1.0	ug/100cm2	1	11/13/2003	
< 1.0	1.0	ug/100cm2	1	11/13/2003	
< 1.0	1.0	ug/100cm2	1	11/13/2003	
< 1.0	1.0	ug/100cm2	1	11/13/2003	
< 1.0	1.0	ug/100cm2	1	11/13/2003	
	< 1.0 < 1.0 < 1.0 < 1.0 < 1.0 < 1.0	SW8082 < 1.0	SW8082 (SW8082 < 1.0 1.0 ug/100cm2 < 1.0 1.0 ug/100cm2	SW8082 (SW8082)  < 1.0	

R - RPD outside accepted recovery limits

314 North Pearl Street Albany, New York 12207 518-434-4546/434-0891 FAX

# CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:		Address:	Street	6	Loc	hest	96-11	NY	
Send Report To:	Jen	FE- WASA	on)	Samp	S-	(Names)	n	_	xknowter
Client Phone No: 585-	- 845-5020	PO Number:	W.1808-1	Samp	lers:	18 typátu	Pho	M	
AES Sample Number	Cli Sample Identific		Date Sampled	Tim A=3.0 P=p.0	m. m.	Sample Matrix	Type day	Number of Cont's	Analysis Required
001	325 - Ria	ht Truck	11/13	700	B P	wife	×	١	PCBs
500	325 - let		11)13	705		nie	*	١	PCBs
003	325 - Bru	ket IN	113			Lite	×	١	PeBs
004	325 - Bu	exet lowt	11/13	715	P	UP	*	1	PeBs
					A P				
	0311130	09			A P				
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		<u> </u>			P	_	-		
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Turnaround Time Request:		Special	Instructions/Rema	rks					
□ 2 Day □ 5 Day									
CC Report To:									
Stave C 5/8	7-766-74	22							
Relingationed by: (Sturature		Received	d by: (Signature)						K/BD Date/Time
Belinquished by: (Signature	)	Received	for Laboratory by	:	1.	(	1	2	Ulizas 8/2
TEMPER	ATURE	PRO	PERLY PRESERVED	/-	1,		1	RECEIVED	WITHIN HOLDING TIMES
Notes: Ambient of	r Chilled	Natas	Y N				Notes	(	Y N
Notes:		Notes:			_		Notes		
		-			_		_		

WHITE - Lab Copy

YELLOW - Sampler Copy

Date: 17-Dec-03

CLIENT:

General Electric Company

Project:

GE-Nassau

Lab Order:

031216022

Lab ID:

031216022-001

Collection Date: 12/16/2003

Client Sample ID: Frac Tank 254549-Wall

Matrix: WIPE

Analyses	Result	PQL Qual	Units	DF	Date Analyzed	
PCBS		SW8082	(SW8082)	)	Analyst: KF	
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	12/16/2003	
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	12/16/2003	
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	12/16/2003	
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	12/16/2003	
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	12/16/2003	
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	12/16/2003	
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	12/16/2003	

Lab ID:

031216022-002

Collection Date: 12/16/2003

Client Sample ID: Frac Tank 254549-Bottom

Matrix: WIPE

Analyses	Result	Result PQL Qual Units		DF	Date Analyzed
PCBS		SW8082	(SW8082)	)	Analyst: KF
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	12/16/2003
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	12/16/2003
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	12/16/2003
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	12/16/2003
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	12/16/2003
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	12/16/2003
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	12/16/2003

R - RPD outside accepted recovery limits

E - Value above quantitation range



#### CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns Client Name: CE- SLC 552 Avil SA M Project Name (Location) Send Report To: Samplers: (Names) GE- WASSELL PO Number: Client Phone No: Samplers; (Signature) Client Fax No: Sample Type Time Number Date A=a.m. AES Matrix Sample Number Sample Identification & Location Sampled P=p.m. Analysis Required GIAC LANK A YMY 8 A P A A 031216622 P A P Α P A P A P Α P А P Α P A P A Turnaround Time Request: Special Instructions/Remarks □ 1 Day ☐ 3 Day □ Normal ☐ 2 Day □ 5 Day CG Report To: Relinquished by: (Signature) Received by: (Signature) Date/Time Relinquished by: (Signature) Received for Laboratory by: Date/Time TEMPERATURE PROPERLY PRESERVED RECEIVED WITHIN HOLDING TIMES Ambient or Chilled Y Notes: Notes: Notes:

WHITE - Lab Copy

YELLOW - Sampler Copy

Date: 18-Dec-03

CLIENT:

General Electric Company

Project:

GE-Nassau

Lab Order:

031217035

Lab ID:

031217035-001

Collection Date: 12/17/2003

Matrix: WIPE

Client Sample ID: Frac Tank Wall Result PQL Qual Units DF Analyses Date Analyzed (SW8082) **PCBS** SW8082 Analyst: KF Aroclor 1016 < 1.0 1.0 ug/100cm2 12/17/2003 1 Aroclor 1221 < 1.0 ug/100cm2 1.0 1 12/17/2003 Aroclor 1232 < 1.0 1.0 ug/100cm2 12/17/2003 Aroclor 1242 < 1.0 ug/100cm2 1.0 12/17/2003 Aroclor 1248 < 1.0 1.0 ug/100cm2 1 12/17/2003 Aroclor 1254 < 1.0 1.0 ug/100cm2 1 12/17/2003 Aroclor 1260 < 1.0 1.0 ug/100cm2 12/17/2003

Lab ID:

031217035-002

Collection Date: 12/17/2003

Client Sample ID: Frac Tank Floor

Matrix: WIPE

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
PCBS		SW8082	(SW8082	2)	Analyst: KF
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	12/17/2003
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	12/17/2003
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	12/17/2003
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	12/17/2003
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	12/17/2003
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	12/17/2003
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	12/17/2003

R - RPD outside accepted recovery limits

E - Value above quantitation range



#### CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: GE- 3 552 Auis abouter Project Name (Location) Samplers: (Names) Send Report To: FE - NADDOLLA Keith PO Number: Samplers: (Signature) Client Phone No: Client Fax No: Sample Type Number Client Sample Identification & Location AES Date A=a.m. Grab Sample Number Sampled Matrix Analysis Required FIRC TONK # A P A P A P A P A P A P A P A P A P A Р A P A P A Turnaround Time Request: Special Instructions/Remarks ☑ 1 Day ☐ 3 Day □ Normal ☐ 2 Day ☐ 5 Day CC Report To: Relinquished by: (Signature) Received by: (Signature) Date/Time Relinquished by: (Signature) Received for Laboratory by: Date/Time 111/03 PROPERLY PRESERVED **TEMPERATURE** RECEIVED WITHIN HOLDING TIMES Ambient or Chilled Y Notes: Notes: Notes:

WHITE - Lab Copy

YELLOW - Sampler Copy

Date: 19-Dec-03

CLIENT:

General Electric Company

Project:

GE-Nassau

Lab Order:

031218034

Lab ID:

031218034-001

Collection Date: 12/18/2003

Client Sample ID: Vac Truck		Matrix: WIPE								
Analyses	Result	PQL Qual	Units	DF	Date Analyzed  Analyst: KF					
PCBS		SW8082	(SW808)	2)						
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	12/19/2003					
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	12/19/2003					
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	12/19/2003					
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	12/19/2003					
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	12/19/2003					
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	12/19/2003					
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	12/19/2003					

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

#### 314 North Pearl Street Albany, New York 12207 518-434-4546/434-0891 FAX

# CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	5/ C.	Address:		1.	. / <	-	5	7.		L	Pac Haston 196	
Send Report To:	11	Project Name (L	ocation)	7	Sample	ers:	(Names	mes)  RecHoston, My				
BISTH A	AMIBLEY	65	10.955	O.								
Client Phone No: 58	5 865562	PO Number:			Sample	ers:	(Signati	ıre)				
Client Fax No: 3-85	865 509	5				_						
AES Sample Number	CI Sample Identifi	ient cation & Location	Date Sample		A=a.m.		Sampl	ample Type trix 🖁 🕏	e Number of Cont's		Analysis Required	
001 1	VAC TAUX	K.	12/1	8	200	A P A	いって			1	PeB's	
						P			+			
		-	)		_	P			-			
	031218	034			_	P			+			
1						Р			-			
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Turnaround Time Request:		Sp	ecial Instructions/l	Remark		-						
5 € 1 Day □ 3 Da	ay 🗆 Normal											
□ 2 Day □ 5 Day	ау											
CC Report To:												
Relinquished by: (Signatu	re)	Re	ceived by: (Signati	ure)							Date/Time	
1000	RATURE	Re	PROPERLY PRESE	1.	V -	5	4		Re	CEIVED	Date/Time	
Ambient Notes:	or Chilled	Notes:	Υ	N		_		No	tes:_		Y N	
						_		_				

WHITE - Lab Copy

YELLOW - Sampler Copy

Date: 02-Dec-03

-				-
6 C		М.	N.	T:
	L/8.	B.:	13	

General Electric Company

Project:

GE-Nassau

Lab Order:

031201019

-	-	-	-	
La	ь	- 10 1	n	
1.4	IJ.		u	

031201019-001

Collection Date: 12/1/2003

Client Sample ID: Frac Tank 948 Wall

Matrix: WIPE

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
PCBS		SW8082	(SW8082	2)	Analyst: KF
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	12/1/2003

Lab ID:

031201019-002

Collection Date: 12/1/2003

Client Sample ID: Frac Tank 948 Bottom

Matrix: WIPE

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
PCBS		SW8082	(SW8082	2)	Analyst: KF
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	12/1/2003

Lab ID:

031201019-003

Client Sample ID: #1 Case 160 Inside Bucket

Collection Date: 12/1/2003

Matrix: WIPE

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
PCBS		SW8082	(SW8082	2)	Analyst: KF
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	12/1/2003
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	12/1/2003

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Date: 02-Dec-03

CLIENT:

General Electric Company

Project:

GE-Nassau

Lab Order:

031201019

Lab ID:

031201019-004

Collection Date: 12/1/2003

Client Sample ID: #2 Case 160 Outside Bucket

Matrix: WIPE

Chem Sample 1D. #2 Case 100 Outside Bucket			Matri	A. WILL		
Analyses	Result	PQL Qual	Units	DF	Date Analyzed	
PCBS		SW8082	(SW8082)		Analyst: KF	
Aroclor 1016	< 1.0	1.0	ug/100cm2	1	12/1/2003	
Aroclor 1221	< 1.0	1.0	ug/100cm2	1	12/1/2003	
Aroclor 1232	< 1.0	1.0	ug/100cm2	1	12/1/2003	
Aroclor 1242	< 1.0	1.0	ug/100cm2	1	12/1/2003	
Aroclor 1248	< 1.0	1.0	ug/100cm2	1	12/1/2003	
Aroclor 1254	< 1.0	1.0	ug/100cm2	1	12/1/2003	
Aroclor 1260	< 1.0	1.0	ug/100cm2	1	12/1/2003	

R - RPD outside accepted recovery limits

### Adirondack Environmental Services Inc

#### 314 North Pearl Street Albany, New York 12207 518-434-4546/434-0891 FAX

### CHAIN OF CUSTODY RECORD

® A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:								
GE 137C		552 AVI	57 \$100	erter NY					
Send Report To: Project Name (Location)			)	Samplers: (Names)					
VICITA HAMBLE	×1	GE- Nursan						Mrs.	
Client Phone No: 51	0405 XIK 10HO	PO Number:		Samplers	: (Signati	ure)	2 -1 -1 14		
	15 865 5095			WA					
AES	CI	ent	Date	Time A=a.m.	Sampl	e Type	Number		
Sample Number	Sample Identific	ation & Location	Sampled	P=p.m.				Analysis Required	
001	Grac Tank 9	48 Wall	12-1-03	9 .10 W	N.C	*		(CD)	
002	Frac Tank	148 BoHom	17-1-13	6 1) P	mee	7		P. (19)	
003	# 1 (A)C 160	Inside preket	12-1-03	1200 A	- with	A		PUBS	
004	#2 the 160 c	148 GoHom Enside oveket outside Bucket	12-1-15	IN A	Mile	4	), Lambo	PCB,	
				P					
				A P					
(	03/2011	019	)	A P					
		and the second s		A P					
				P					
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~				A P					
Turnaround Time Request:		Special In	structions/Rema	rks					
1 Day 🗆 3 Da									
☐ 2 Day ☐ 5 Da  CC Report To:		**************************************							
Steve Stakmin		1712			) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (				
Relinquished by: (Signatur)	B)	Received	by: (Signature)					Date/Time	
Relinquished by: (Signature	e)	. 1	for Laboratory by	r. Li	(,		RECEIVE	Date/Time	
Notes:	or Chilled	Notes:	Y N			Notes:			

WHITE - Lab Copy

YELLOW - Sampler Copy

PINK - Generator Copy

## Appendix F

### **Air Monitoring Field Data**



		Upv	vind	Downwind		
Date	Time	OVA	Dust	OVA	Dust	
		(ppm)	(ppm)	(ppm)	(ppm)	
09/09/03	1:30 PM	0.0	0.040	0.0	0.040	
09/09/03	2:00 PM	0.0	0.040	0.0	0.040	
09/09/03	2:30 PM	0.0	0.020	0.0	0.020	
09/09/03	3:00 PM	0.0	0.000	0.0	0.010	
09/09/03	3:30 PM	0.0	0.030	0.0	0.030	
09/09/03	4:00 PM	0.0	0.030	0.0	0.030	
09/10/03	8:00 AM	0.0	0.000	0.0	0.000	
09/10/03	8:30 AM	0.0	0.000	0.0	0.000	
09/10/03	9:00 AM	0.0	0.000	0.0	0.000	
09/10/03	9:30 AM	0.0	0.000	0.0	0.000	
09/10/03	10:00 AM	0.0	0.000	0.0	0.000	
09/10/03	10:30 AM	0.0	0.000	0.0	0.000	
09/10/03	11:00 AM	0.0	0.000	0.0	0.000	
09/10/03	11:30 AM	0.0	0.000	0.0	0.000	
09/10/03	12:00 PM	0.0	0.000	0.0	0.000	
09/10/03	12:30 PM	0.0	0.000	0.0	0.000	
09/10/03	1:00 PM	0.0	0.000	0.0	0.000	
09/10/03	1:30 PM	0.0	0.000	0.0	0.000	
09/10/03	2:00 PM	0.0	0.000	0.0	0.000	
09/10/03	2:30 PM	0.0	0.000	0.0	0.000	
09/10/03	3:00 PM	0.0	0.000	0.0	0.003	
09/10/03	3:30 PM	0.0	0.000	0.0	0.000	
09/10/03	4:00 PM	0.0	0.000	0.0	0.000	
09/11/03	9:30 AM	0.0	0.000	0.0	0.000	
09/11/03	10:00 AM	0.0	0.000	0.0	0.000	
09/11/03	10:30 AM	0.0	0.000	0.0	0.000	
09/11/03	11:00 AM	0.0	0.000	0.0	0.000	
09/11/03	11:30 AM	0.0	0.000	0.0	0.000	
09/11/03	12:00 PM	0.0	0.000	0.0	0.000	
09/11/03	12:30 PM	0.0	0.000	0.0	0.000	
09/11/03	1:00 PM	0.0	0.000	0.0	0.000	
09/11/03	1:30 PM	0.0	0.000	0.0	0.000	
09/11/03	2:00 PM	0.0	0.000	0.0	0.000	
09/11/03	2:30 PM	0.0	0.000	0.0	0.000	
09/11/03	3:00 PM	0.0	0.000	0.0	0.000	
09/15/03	9:00 AM	0.0	0.008	0.0	0.008	
09/15/03	9:30 AM	0.0	0.002	0.0	0.002	
09/15/03	10:00 AM	0.0	0.000	0.0	0.000	
09/15/03	10:30 AM	0.0	0.000	0.0	0.000	
09/15/03	11:00 AM	0.0	0.000	0.0	0.000	
09/15/03	11:30 AM	0.0	0.002	0.0	0.002	
09/15/03	12:00 PM	0.0	0.000	0.0	0.000	
09/15/03	12:30 PM	0.0	0.001	0.0	0.001	
09/15/03	1:00 PM	0.0	0.000	0.0	0.000	
09/15/03	1:30 PM	0.0	0.000	0.0	0.000	
09/15/03	2:00 PM	0.0	0.000	0.0	0.000	
09/16/03	8:30 AM	0.0	0.000	0.0	0.000	
09/16/03	9:00 AM	0.0	0.001	0.0	0.000	
09/16/03	9:30 AM	0.0	0.000	0.0	0.000	
09/16/03	10:00 AM	0.0	0.000	0.0	0.000	
09/16/03	10:30 AM	0.0	0.000	0.0	0.000	
09/16/03	11:00 AM	0.0	0.000	0.0	0.000	
09/16/03	11:30 AM	0.0	0.000	0.0	0.000	
09/16/03	12:00 PM	0.0	0.000	0.0	0.000	
09/16/03				n and 3:30 pr		
09/16/03	3:30 PM	0.0	0.004	0.0	0.004	
09/16/03	4:00 PM	0.0	0.000	0.0	0.001	
09/16/03	4:30 PM	0.0	0.000	0.0	0.000	

		Upv	wind	Downwind			
Date	Time	OVA	Dust	OVA	Dust		
		(ppm)	(ppm)	(ppm)	(ppm)		
09/17/03	7:30 AM	0.0	0.001	0.0	0.001		
09/17/03	8:00 AM	0.0	0.008	0.0	0.008		
09/17/03	8:30 AM	0.0	0.007	0.0	0.007		
09/17/03	9:00 AM	0.0	0.013	0.0	0.013		
09/17/03	9:30 AM	0.0	0.007	0.0	0.009		
09/17/03	10:00 AM	0.0	0.000	0.0	0.000		
09/17/03	10:30 AM	0.0	0.000	0.0	0.000		
09/17/03	11:00 AM	0.0	0.003	0.0	0.003		
09/17/03	11:30 AM	0.0	0.000	0.0	0.000		
09/17/03	12:00 PM	0.0	0.000	0.0	0.000		
09/17/03	12:30 PM	0.0	0.013	0.0	0.013		
09/17/03	1:00 PM	0.0	0.000	0.0	0.000		
09/17/03	1:30 PM	0.0	0.000	0.0	0.000		
09/17/03	2:00 PM	0.0	0.000	0.0	0.000		
09/17/03	2:30 PM	0.0	0.000	0.0	0.000		
10/06/03	9:45 AM	0.0	0.001	0.0	0.001		
10/06/03	10:15 AM	0.0	0.000	0.0	0.000		
10/06/03	10:45 AM	0.0	0.000	0.0	0.000		
10/06/03	11:15 AM	0.0	0.001	0.0	0.001		
10/06/03	11:45 AM	0.0	0.000	0.0	0.000		
10/06/03	12:15 PM	0.0	0.000	0.0	0.000		
10/06/03	12:45 PM	0.0	0.000	0.0	0.000		
10/06/03	1:15 PM	0.0	0.000	0.0	0.001		
10/06/03	1:45 PM	0.0	0.000	0.0	0.000		
10/06/03	2:15 PM	0.0	0.000	0.0	0.000		
10/06/03	2:45 PM	0.0	0.001	0.0	0.001		
10/07/03	11:00 AM	0.0	0.000	0.0	0.000		
10/07/03	11:30 AM	0.0	0.001	0.0	0.001		
10/07/03	12:00 PM 12:30 PM	0.0	0.002 0.001	0.0	0.002		
10/07/03	1:00 PM	0.0	0.001	0.0	0.001		
10/07/03	1:30 PM	0.0	0.000	0.0	0.000		
10/07/03	2:00 PM	0.0	0.000	0.0	0.000		
10/07/03	2:30 PM	0.0	0.000	0.0	0.000		
10/07/03	3:00 PM	0.0	0.001	0.0	0.000		
10/08/03	7:30 AM	0.0	0.003	0.0	0.002		
10/08/03	8:00 AM	0.0	0.001	0.0	0.001		
10/08/03	8:30 AM	0.0	0.000	0.0	0.000		
10/08/03	9:00 AM	0.0	0.000	0.0	0.000		
10/08/03	9:30 AM	0.0	0.002	0.0	0.003		
10/08/03	10:00 AM	0.0	0.000	0.0	0.000		
10/08/03	10:30 AM	0.0	0.000	0.0	0.000		
10/08/03	11:00 AM	0.0	0.001	0.0	0.002		
10/08/03	11:30 AM	0.0	0.000	0.0	0.000		
10/08/03	12:00 PM	0.0	0.000	0.0	0.001		
10/08/03	12:30 PM	0.0	0.002	0.0	0.001		
10/08/03	1:00 PM	0.0	0.000	0.0	0.000		
10/08/03	1:30 PM	0.0	0.000	0.0	0.000		
10/08/03	N	lo data betw	een 1:30 pm	and 4:00 pn	1		
10/08/03	4:00 PM	0.0	0.000	0.0	0.000		
10/08/03	4:30 PM	0.0	0.002	0.0	0.002		
10/09/03	7:30 AM	0.0	0.000	0.0	0.000		
10/09/03	8:00 AM	0.0	0.000	0.0	0.000		
10/09/03	8:30 AM	0.0	0.000	0.0	0.000		
10/09/03	9:00 AM	0.0	0.001	0.0	0.000		
10/09/03	9:30 AM	0.0	0.000	0.0	0.001		
10/09/03	10:00 AM	0.0	0.000	0.0	0.000		
10/09/03	10:30 AM	0.0	0.002	0.0	0.003		
10/09/03	11:00 AM	0.0	0.000	0.0	0.000		
10/09/03	11:30 AM	0.0	0.000	0.0	0.000		
10/09/03	12:00 PM	0.0	0.000	0.0	0.000		

		Upv	vind	Downwind			
Date	Time	OVA	Dust	OVA	Dust		
		(ppm)	(ppm)	(ppm)	(ppm)		
10/09/03	12:30 PM	0.0	0.000	0.0	0.000		
10/09/03	1:00 PM	0.0	0.000	0.0	0.000		
10/09/03	1:30 PM	0.0	0.000	0.0	0.000		
10/09/03	2:00 PM	0.0	0.000	0.0	0.000		
10/09/03			•	and 3:30 pn			
10/09/03	3:30 PM	0.0	0.000	0.0	0.007		
10/09/03	4:00 PM	0.0	0.000	0.0	0.007		
10/09/03	4:30 PM	0.0	0.000	0.0	0.002		
10/10/03	8:30 AM	0.0	0.000	0.0	0.000		
10/10/03	9:00 AM	0.0		0.0			
10/10/03	9:30 AM	0.0	0.000	0.0	0.000		
10/10/03	10:00 AM	0.0		0.0	0.000		
10/10/03	10:30 AM		0.000		0.000		
		0.0	0.000	0.0	0.000		
10/10/03	11:00 AM	0.0	0.000	0.0	0.000		
10/10/03	11:30 AM	0.0	0.000	0.0	0.000		
10/10/03	12:00 PM	0.0	0.000	0.0	0.000		
10/10/03	12:30 PM	0.0	0.000	0.0	0.000		
10/10/03	1:00 PM	0.0	0.000	0.0	0.000		
10/10/03	1:30 PM	0.0	0.000	0.0	0.000		
10/10/03	2:00 PM	0.0	0.000	0.0	0.000		
10/10/03	2:30 PM	0.0	0.000	0.0	0.000		
10/10/03	3:00 PM	0.0	0.000	0.0	0.000		
10/10/03	3:30 PM	0.0	0.000	0.0	0.000		
10/10/03	4:00 PM	0.0	0.000	0.0	0.000		
10/10/03	4:30 PM	0.0	0.000	0.0	0.000		
10/10/03	5:00 PM	0.0	0.000	0.0	0.000		
10/11/03	8:30 AM	0.0	0.000	0.0	0.000		
10/11/03	9:00 AM	0.0	0.000	0.0	0.000		
10/11/03	9:30 AM	0.0	0.000	0.0	0.000		
10/11/03	10:00 AM	0.0	0.000	0.0	0.000		
10/11/03	10:30 AM	0.0	0.000	0.0	0.000		
10/11/03	11:00 AM	0.0	0.000	0.0	0.007		
10/11/03	11:30 AM	0.0	0.000	0.0	0.000		
10/11/03	N	o data betw	een 11:30 ar	n and 1:00 pr	n		
10/11/03	1:00 PM	0.0	0.001	0.0	0.000		
10/11/03	1:30 PM	0.0	0.000	0.0	0.000		
10/11/03	2:00 PM	0.0	0.002	0.0	0.000		
10/11/03	2:30 PM	0.0	0.000	0.0	0.000		
10/11/03	3:00 PM	0.0	0.002	0.0	0.001		
10/11/03	3:30 PM	0.0	0.002	0.0	0.000		
10/11/03	4:00 PM	0.0	0.001	0.0	0.000		
10/11/03	4:30 PM	0.0	0.001	0.0	0.002		
10/11/03	7:30 AM						
		0.0	0.000	0.0	0.000		
10/12/03	8:00 AM	0.0	0.000	0.0	0.000		
10/12/03	8:30 AM	0.0	0.000	0.0	0.000		
10/12/03	9:00 AM	0.0	0.000	0.0	0.000		
10/12/03	9:30 AM	0.0	0.000	0.0	0.000		
10/12/03	10:00 AM	0.0	0.001	0.0	0.002		
10/12/03	10:30 AM	0.0	0.000	0.0	0.001		
10/12/03	11:00 AM	0.0	0.000	0.0	0.001		
10/12/03	11:30 AM	0.0	0.000	0.0	0.000		
10/12/03				and 12:30 p			
10/12/03	12:30 PM	0.0	0.000	0.0	0.000		
10/12/03	1:00 PM	0.0	0.000	0.0	0.000		
10/12/03	1:30 PM	0.0	0.000	0.0	0.000		
10/12/03	2:00 PM	0.0	0.000	0.0	0.000		
10/12/03	2:30 PM	0.0	0.000	0.0	0.000		
10/13/03	9:00 AM	0.0	0.000	0.0	0.000		
10/13/03	9:30 AM	0.0	0.000	0.0	0.000		
10/13/03	10:00 AM	0.0	0.000	0.0	0.000		

		Upv	wind	Downwind		
Date	Time	OVA	Dust	OVA	Dust	
		(ppm)	(ppm)	(ppm)	(ppm)	
10/13/03	11:00 AM	0.0	0.000	0.0	0.002	
10/13/03	11:30 AM	0.0	0.000	0.0	0.000	
10/13/03	12:00 PM	0.0	0.000	0.0	0.000	
10/13/03	12:30 PM	0.0	0.001	0.0	0.003	
10/20/03	9:30 AM	0.0	0.000	0.0	0.000	
10/20/03	10:00 AM	0.0	0.000	0.0	0.000	
10/20/03	10:30 AM	0.0	0.000	0.0	0.000	
10/20/03 10/20/03	11:00 AM 11:30 AM	0.0	0.000	0.0	0.000	
10/20/03	12:00 PM	0.0	0.000	0.0	0.000	
10/20/03	12:30 PM	0.0	0.000	0.0	0.000	
10/20/03	1:00 PM	0.0	0.000	0.0	0.000	
10/20/03	1:30 PM	0.0	0.000	0.0	0.000	
10/20/03	2:00 PM	0.0	0.000	0.0	0.000	
10/20/03	2:30 PM	0.0	0.000	0.0	0.000	
10/20/03	3:00 PM	0.0	0.000	0.0	0.000	
10/20/03	3:30 PM	0.0	0.000	0.0	0.000	
10/20/03	4:00 PM	0.0	0.000	0.0	0.000	
10/20/03	4:30 PM	0.0	0.000	0.0	0.000	
10/20/03	5:00 PM	0.0	0.000	0.0	0.000	
10/21/03	12:00 PM	0.0	0.000	0.0	0.000	
10/21/03	12:30 PM	0.0	0.000	0.0	0.000	
10/21/03	1:00 PM	0.0	0.000	0.0	0.000	
10/21/03 10/21/03	1:30 PM	0.0	0.000	0.0	0.000	
10/21/03	2:00 PM 2:30 PM	0.0	0.000	0.0	0.000	
10/21/03	3:00 PM	0.0	0.000	0.0	0.000	
10/22/03	9:00 AM	0.0	0.002	0.0	0.002	
10/22/03	9:30 AM	0.0	0.000	0.0	0.000	
10/22/03	10:00 AM	0.0	0.000	0.0	0.000	
10/22/03	10:30 AM	0.0	0.000	0.0	0.000	
10/22/03	11:00 AM	0.0	0.000	0.0	0.001	
10/22/03	11:30 AM	0.0	0.000	0.0	0.001	
10/22/03	12:00 PM	0.0	0.000	0.0	0.000	
10/22/03	12:30 PM	0.0	0.000	0.0	0.000	
10/22/03	1:00 PM	0.0	0.000	0.0	0.000	
10/22/03	1:30 PM	0.0	0.000	0.0	0.000	
10/22/03	2:00 PM	0.0	0.000	0.0	0.000	
10/22/03	2:30 PM	0.0	0.000	0.0	0.000	
10/22/03				and 4:00 pm		
10/22/03	4:00 PM 4:30 PM	0.0	0.000	0.0	0.000	
10/22/03	7:30 AM	0.0	0.000	0.0	0.000	
10/23/03	8:00 AM	0.0	0.000	0.0	0.000	
10/23/03	8:30 AM	0.0	0.000	0.0	0.000	
10/23/03	9:00 AM	0.0	0.000	0.0	0.000	
10/23/03	9:30 AM	0.0	0.000	0.0	0.000	
10/23/03	10:00 AM	0.0	0.000	0.0	0.000	
10/23/03	10:30 AM	0.0	0.010	0.0	0.000	
10/23/03	11:00 AM	0.0	0.010	0.0	0.010	
10/23/03	11:30 AM	0.0	0.000	0.0	0.000	
10/23/03	12:00 PM	0.0	0.000	0.0	0.000	
10/23/03	12:30 PM	0.0	0.000	0.0	0.000	
10/23/03	1:00 PM	0.0	0.001	0.0	0.001	
10/23/03	1:30 PM	0.0	0.000	0.0	0.000	
10/23/03	2:00 PM	0.0	0.000	0.0	0.000	
10/23/03	2:30 PM	0.0	0.000	0.0	0.000	
10/23/03	3:00 PM	0.0	0.000	0.0	0.000	
10/23/03	3:30 PM	0.0	0.000	0.0	0.000	
	4:00 PM	0.0	0.000	0.0	0.000	
10/23/03		0.0	0.000	0.0	0.000	
10/23/03 10/23/03 10/23/03	4:30 PM 5:00 PM	0.0	0.000	0.0	0.000	

### Appendix G

### **As-Built Survey Coordinate Data**



ID	Northing	Easting	Elevation	Description
1003	930455,2547	699661.4842	432.822589	EX GND
1004	930460.0253			EX GND
1007		699660.2798		
1009		699644.978		
1010	930417.1691	699647.83	433.550575	
1012		699642.9454		
1015		699612.9711	436.626268	
1016		699625.0816		
1017		699614.9648		
1018			431.890888	
	930357.1562			
	930373.6184			
1021		699590.0622	432.971432	
1022	930355.3482			
1023				
1024	930345.3329			
1025	930337.5295	699589.55		
	930334.3155			
1027		699605.4121		
1028		699541.9756		
1031		699587.454		
1032		699582.2423		
1033		699570.2803		
1034		699566.014		
1035		699557.6075		
1038		699545.2548		
1039		699543.9259		
1042		699514.0026		
1055		699430.1286		
1056		699427.2209		
1057	930196.4565	699425.6511		
1058		699423.5059	433.95402	
1060		699391.1116		
1061	930149.1444	699387.2733		
1062	930180.1459	699381.6946	433.643476	EX GND
1063	930193.1679	699390.054	434.325762	EX GND
1065		699353.4581	431.942019	
1101		699606.1886		
1102	930439.4625		430.507473	
1103	930436.5839	699629.9662	430.716856	EWT1
1104		699622.9668		EWT1
1105				
1106	930409.8102	699609.5266	430.468597	
1107	930407.9065	699607.3597	430.809821	
1109	930423.9205	699593.8714	430.491655	EWT4
1110	930383.5638	699581.0212	430.549643	EWT1
1112	930405.3212	699570.3348	430.178057	EWT4
1113	930409.1392	699573.7331	430.459032	EWT4
1115	930362.6097	699561.0085	430.750924	EWT1
1116	930357.9132	699557.3699	430.882574	EWT1
1118	930350.1679	699553.2591	430.091568	EWT1
1119	930349.7028	699531.6906	430.365768	EWT2
1120	930349.3201	699518.719	431.007544	EX GND

ID	Northing	Easting	Elevation	Description
1121		699510.5156		
1122		699516.3643		
1123		699524.5343		
	930382.5163			
1125		699540.2184		
1126		699544.1564		
1127	930390.18			
1129		699515.4522		
1130		699525.0164		
1131		699532.0418		
1132		699523.0299		
	930341.0851			
	930332.552			
1135		699538.5379		
1136 1137		699530.7843 699521.1379		
1137		699514.559		
1139		699510.4364		
	930325.4465			
1140				
1141				
1142		699529.8782		EWIZ EWIS
	930333.0576			
	930333.0376			
	930275.6903			
1146		699521.3011		
	930296.8132			
	930290.6132			
1150		699537.5362		
1150		699554.6015		
1151		699558.9337		
1153		699565.0293		
1154		699557.7868		
1155		699577.9525		
1156				
1157		699597.3852		
1158		699576.6474	432.68247	
1150		699596.5723		
	930394.9363			
	930376.5965			
1162	930391.9435			
1163	930442.6635	699636.5776	431.848227	
1164	930436.8794	699644.927	432.979746	
1165	930455.4553	699652.8666	435.866023	
1166	930460.6339	699642.7964	431.853084	
1167	930461.4642	699640.4614	430.074163	
1168	930491.4042	699652.3432	430.074103	
1169	930490.9792	699655.6223	431.392661	
1170	930487.1666	699662.3235	431.289743	
1170	930478.0864	699656.7204	431.209743	
1171	930470.0004	699661.6514	435.964396	
1172	930484.3535	699669.5435	435.367363	
1173	930474.359	699685.762	433.531578	
11/4	300414.339	033000.702	+55.551576	ואסטועו

ID	Northing	Easting	Elevation	Description
1175	930439.2216	699659.7009	433.083745	SDR1
1176	930428.8538	699650.1471	432.945437	SDR1
1177	930424.8789	699660.6149	433.142927	SDR1
1178	930415.7444		433.888239	SDR1
1179	930436.8495	699680.5836	433.473483	
1180	930467.4737	699704.2305	433.809231	
1202	930437.195	699595.4611	430.190146	
1203	930427.5612	699559.3849	434.54319	
1204	930425.4428	699557.2216	434.792106	
1205	930417.0104			
1207	930394.4938	699527.4368	435.398566	EX GND
	930392.3176	699525.2342	435.322521	EX GND
1210	930374.5163	699520.7695	431.009838	
1213	930370.7834	699499.7331	434.974868	
1215		699496.1074	431.707111	
1217			431.646139	
1218		699451.5506	434.475367	
	930337.8718			
1221	930300.4336	699464.0824		
1222	930324.2099		430.865612	
1223	930319.3521	699408.4864	429.203497	
1224			430.093937	
1225	930326.9858	699402.5893	433.728205	
1228	930276.1654		431.612326	
1229		699432.3641	430.548933	
1230		699415.2746	430.078775	
1231		699406.8175	429.472924	EWT4
1232	930270.2596	699403.185	428.377653	
1233		699391.6767	428.700527	
1234	930307.3055	699382.7565	427.980799	CREEK
1235	930307.8605	699380.9565	428.671114	
1236	930321.8432	699370.2777	434.363566	
1237	930333.3944	699374.8598	432.600652	
1241	930323.4814	699356.1799	432.562566	EX GND
1242	930321.9242	699364.4962	433.981405	
1243	930303.1001	699353.4096	434.172619	
1244	930305.1151	699348.7426	433.052193	
1245		699359.783		
1246	930295.3428	699363.7205	434.430127	EX GND
1247	930277.4107	699377.5852	434.339764	
1248	930266.0367	699374.6437		
1249		699378.1851	434.176245	EX GND
1250		699362.4284	431.155295	
1251	930259.4079	699358.8536	429.946979	
1254	930284.134	699344.6721	432.063846	EX GND
1400	930248.1385	699517.8936	433.164838	SEL
1401	930260.2912	699506.2256	433.868652	
1402	930267.2896	699503.1763	431.495006	
1403	930242.595	699476.8687	431.827484	
1404	930232.1738	699482.0417	433.11922	SEL
4.405	930222.3645	699491.4528	433.886366	
1405	930222.3043	033431.4320	<del>400.000000</del>	SLL
1405 1406		699470.0557	434.399776	

ID	Northing	Easting	Elevation	Description
1408	930235.87	699446.678	430.657801	•
1409		699495.753	429.965048	
1410	930243.2406	699470.4062	429.799916	
1411	930238.0244		429.965045	
1412	930213.9921	699440.6678	431.729315	
1413	930208.2723	699444.0488	433.931701	
1414		699429.7941	431.4129	
1415	930225.5007	699424.1846	430.577072	
1416		699423.6485	429.178935	
1417	930222.2496	699411.8166	430.776289	
1418	930213.3739		433.215324	
1419		699399.3089	432.059906	
_	930209.8833		434.69749	
1421	930207.2341	699387.6346	434.728633	
1422		699379.7972	431.677321	
1423		699382.3224	431.221444	
1424		699369.4576	431.057127	
1425	930200.8035	699375.9535	433.142969	
1426			430.672165	
1427		699340.8651	430.202914	
			429.502376	
1429		699352.3271	432.434245	
		699362.4166	433.403973	
1431		699420.0988	433.089166	
1432		699434.4035	433.408575	
1433		699431.5665	433.801212	
		699426.6638	433.502555	
1435		699429.9412	433.826957	
1436	930179.0966	699433.1021	436.727239	
1437	930174.5241	699439.7864	436.839158	
1438	930176.9697	699442.1193	434.982469	
1439		699371.8674	433.577052	
1440	930304.0713	699366.4945	434.086194	
1441		699366.2863	434.205611	
1442	930278.4591	699378.9258	433.815202	
1443		699386.3823	434.30919	
1444	930250.9743	699388.849	434.05245	
1445		699384.9908	433.857834	
1446		699376.2616	434.138696	
1447		699374.1733	433.496377	
1448	930258.2412	699379.6761	433.951267	
1449	930269.2399	699370.4962	434.230011	
1450	930264.6551	699365.7478	433.651966	
1451	930265.016	699358.0522	433.563251	
1452	930263.9804	699353.3895	432.966625	
1453	930445.7477	699587.7912	434.524869	
1454	930441.3956	699591.7315	432.477291	
1455	930418.9	699565.4969	434.647817	
1456	930417.5337	699582.6525	431.279781	
1457	930407.3938	699568.9065	431.140151	ELB5
1458	930394.775	699555.4582	430.911834	
1459	930393.3687	699556.223	430.014492	
1460	930402.2621	699543.3641	435.120567	

ID	Northing	Easting	Elevation	Description
1461	930387.7106	699530.6911	434.191625	ELB4
		699534.1012		
1463		699516.5243		
1464		699513.4706		
1465	930367.8337	699520.222	429.296671	
1466		699513.2904		
1467		699512.2826		
1468		699510.1593		
1469	930347.0738	699505.9734	431.310195	
		699506.5971	429.390021	
1471	930337.5067			
	930337.4979			
1473		699498.6014		
	930317.4707			
	930294.3803			
	930295.0283			
		699481.6852		
1478		699482.5565		
	930262.3208			
	930261.3143		429.486779	
1481		699450.1718		
1483	930251.2852			
1484	930250.4047	699415.596		
1485	930257.4461	699411.212		
1486				
1487		699411.5216		
1488	930288.7248	699405.7388	429.451258	
1489		699421.0049	429.548531	
1490	930321.1775		429.648264	
1491	930320.6537		430.367796	
1492	930327.7787	699451.5114	430.552197	
1493		699467.0666	431.166062	
1494	930345.0561	699459.3229	434.857958	
1495	930353.538			
1496	930345.9707	699476.7111	431.273124	
1497		699409.5426		
1498		699473.2475		
	930276.5474			
1600		699428.7089	430.700109	
1601	930306.3016		431.079417	
1602		699475.5676	431.319447	
1603	930247.0003	699394.8765	429.072401	
1604	930244.014	699389.6438	430.127142	
1605	930251.2181	699395.5453	429.201603	
1606	930267.7535	699393.5875	429.779	
1607	930284.0391	699385.1573	429.697445	
1608	930297.3081	699374.5462	428.91834	
1609	930305.3809	699376.0082	428.882268	
1938	930345.8426	699508.6245	428.812385	
1939	930337.1447	699505.0996	428.989665	
1940	930315.9144	699502.5096	428.473996	
1941	930301.0516	699497.3061	429.041835	

#### **Survey Information - Existing Conditions**

ID	Northing	Easting	Elevation	Description
1942	930297.797	699497.2737	429.083016	CREEK
1944	930292.5175	699497.0597		
1951	930260.3741	699471.2311	429.131134	CREEK
1952	930272.088		429.18752	
1958	930250.3622	699445.3572	429.533444	CREEK
1959			429.57467	
	930247.0936			
1961	930248.1014	699415.192	429.197147	CREEK
1962	930247.5226	699422.05	429.123986	CREEK
1963	930228.5504			
1964			428.810445	CREEK
1965	930227.8266	699404.0572	430.429095	EWT1
1966	930248.0393		428.809448	
1967	930228.5929			
1968	930224.5632	699381.3118	430.394889	EWT1
1969			430.477806	
1970		699351.7398	429.775232	EWT1
1975		699390.563		
1976	930257.16	699442.3638	429.607623	EWT4
1977	930252.7176	699451.2814	429.712909	EWT4
50000	930478.6443	699653.033	432.187691	inv s30"hdpe
	930498.2595			
50002	930694.1118			
50003	930802.7016	700010.2943	433.760576	sw weire
		700020.1139		
	930813.8003			
	930812.6331	700020.2992	431.548729	
50007	930811.3681		431.882657	cl weire
	930826.7398		433.757009	
	930814.3648		432.188392	
50010	930810.0885		431.705585	
50011		700017.6996		
	930812.1479			
	930813.0644			
	930820.6453			
	930799.6238			
50016	930794.4117	700036.3688	434.187521	brass bolt@creek

Key for descriptions can be found at the end of Appendix  ${\sf G}$ 

ID	Northing	Easting	Elevation	Description
11003	930455.1378		433.90925	
11004		699655.0296		
11007		699659.9842		_
		699644.9471	434.731436	
11010		699647.6212	431.529822	
		699642.9768		
		699613.0581	435.433766	
11013		699625.1652		
	930395.446			
	930408.8579		427.58	
		699604.1572	432.70919	
11019				
	930373.5726		430.996999	
11021	930374.1828		429.518199	
11022		699569.7938	429.5979	
	930353.0919			
	930345.4071			
11025		699589.4267	431.092956	
		699589.9004	431.913352	
11027	930319.2196			
11031		699587.4938	437.952661	
	930299.7267			
11033	930315.1287			
11034		699565.9581	433.371061	
	930328.3974		430.89695	
11038	930294.3027			
11039				
	930270.8492			
	930156.5254	699430.1569	432.802014	SEL
11056	930193.4352	699427.1289	433.052636	SEL
11057	930196.5565	699425.7369	432.998021	SEL
11058	930198.0561	699423.3766	432.953282	SEL
11060	930147.0167	699390.9726	432.794377	SEL
11061	930149.2543	699387.2568	432.962732	SEL
11062	930180.1106	699381.6355	433.139833	SEL
11063	930193.1286	699390.0057	433.324145	SEL
11065	930187.6221	699353.561	430.884857	SEL
11101	930431.8117	699606.183		
11102	930439.488			
11103		699629.8956		
	930424.2087			
	930418.0895			
11106		699609.5266	427.49	
	930407.9146			
11109		699593.8629	427.417106	
11110	930383.6029	699581.0451	427.528922	
11112	930405.3607	699570.3855	427.790664	
11113	930409.2609	699573.8414	427.893338	
11115	930362.2867	699561.2733	428.723589	
11116	930358.1633	699557.3481	429.980744	
11118	930350.0888	699553.4269	429.561915	
11119	930330.0888	699531.5365	426.361613	
11119			426.361613	
11120	930349.8362	699518.749		
	930348.9779	699512.1963	425.26753	
11122	930359.4804	699516.5662	427.173115	
11123	930371.0319	699524.4534	428.111079	
11124	930382.5526	699537.7681	428.284521	SEL

ID	Northing	Easting	Elevation	Description
11125	930380.3593	699540.1042		
11126	930382.6886	699544.1255	427.752564	
11127	930389.7592	699539.1909	430.47222	
l	930342.8534	699515.9769		
11130	930331.2761	699524.807	426.594252	
11131		699532.0922	426.662282	
	930316.8972	699522.9915	429.087689	
11133		699549.3062	429.5	
11134	930332.552	699544.8914		
11135	930323.883	699538.5656		
11136		699530.7204	429.143344	
11137		699521.2166		
		699535.2773		_
11145		699512.3221	429.176974	
	930275.6104			
11147		699521.3269		
11148	930296.7633	699523.7582	431.419669	
11149		699540.7882		
11150	930317.8784			
11151		699554.5394	430.620302	
		699559.0212		
	930343.8163			
	930355.5098	699557.7701	430.056446	
	930319.5497	699577.975	432.184144	
11156	930331.4682	699585.5818		
11157	930355.3044	699597.6187	431.425823	SEL
11158		699576.6728		
11159	930394.9713	699596.5727	428.611174	SEL
11160	930376.6548	699612.0873		
11161		699623.5251	429.103591	
11162	930391.9128	699639.9837	433.556769	
11163	930442.6635	699636.5776	430.69	SEL
11164	930436.8794	699644.927	431.55	SEL
11165	930455.5139	699653.0086	433.590433	SEL
11175	930439.1745	699659.6529	431.777149	SEL
11176	930428.8416	699650.071	431.848731	SEL
11177	930424.8789	699660.6149	432.5	SEL
11202	930437.3029	699595.5333	428.045512	SEL
11203	930427.48	699559.5322	432.493099	
11204	930425.3862			
11205		699560.0202		
11207	930394.2984	699527.3018	433.54554	
	930392.0407	699525.29		
	930374.3475	699521.0664	428.898782	SEL
11213	930370.7114	699499.6616	434.096858	PT1213
11215	930354.3851	699493.8797	426.281425	
11217	930336.9684	699477.62	427.523834	
11218	930338.6355	699451.7198	429.797118	
11220	930337.8718	699450.8386	427.5	
11221	930300.4336	699464.0824	425.93	rock
11222	930324.0641	699435.9437	425.848837	
11223	930319.0214	699410.6422	426.009649	
11224	930321.4618	699404.3737	427.287	
11225	930327.0567	699402.5381	431.829377	
11228	930276.1654	699445.0853	426.01	rock

ID	Northing	Easting	Elevation	Description
				•
11229	930286.0717 930288.8245	699432.3641 699416.0358	425.5 426.371441	
11230 11231	930284.4867	699406.7702		
11232	930270.2754 930290.3992	699403.3177 699391.6767	426.615566	
11233			426.48	
11234	930307.3055	699382.7565	425.73	
11235	930307.7432	699381.009		
11236	930321.7939	699370.254	433.304284	
11241 11242	930323.4248	699356.3161 699364.4772	431.511246	
	930321.8846		432.883742	
11243	930303.0696	699353.465 699353.0173	433.106781 432.924097	
11244	930306.949			
11245	930295.2628	699359.8192	432.929907 432.460236	
11246	930295.4067	699363.7971		
11247	930277.4983		432.666517	
11248		699374.7862		
11249	930264.3965	699378.2744 699362.4035	433.071224 430.512705	
11250	930261.9556	699362.4035	430.512705	
11251 11254	930259.3665		431.555482	
			429.002975	
11415 11416	930225.5177 930227.3278	699424.2267		
	930227.3278	699411.7808	429.22845	
11417 11418		699409.5389	431.853431	
11419		699399.3964	430.969069	
11419		699400.7485	433.012972	
11421	930209.7004	699387.6207	433.396452	
11422		699379.8243		
11423	930222.8378			
11424	930210.9856	699369.3965	429.009002	
11425		699375.8574	432.022611	
11426	930198.0992	699353.2682		
11434	930175.6492	699426.6108	432.594232	
11439	930313.6199	699371.8227	431.946221	
11440	930304.0273			
11441	930295.5472	699366.2938	432.2954	
11442	930278.3351	699378.9063		
11443		699386.3446	431.899531	
11444	930251.0573	699388.6984	430.803733	
	930269.1597	699370.555		
11450		699365.7142		
11451	930264.9664	699358.1282	432.468612	
11455	930419.0155	699565.343		
11456	930417.4568		427.407147	
11457	930407.3711	699568.9467	427.883249	SEL
11461	930387.7872	699530.5469	432.217392	SEL
11462	930384.2743	699534.0945	429.391387	SEL
11465	930367.7797	699520.2987	427.567891	SEL
11467	930360.9113	699512.2804	427.79037	SEL
11468	930368.0484	699510.2669	429.532416	SEL
11469	930347.2029	699505.8306	425.693664	
11470	930347.0253	699506.9635	425.755621	
11471	930337.4255	699503.1715	425.7756	
11472	930337.8079	699501.4206	425.708665	
11473	930316.3376	699498.1792	427.540347	SEL

ID	Northing	Easting	Elevation	Description
11474		699499.5187		
11475		699492.9752		
11476		699494.4247		
	930273.9922	699481.7766		
11478		699482.5565	426.59	
11479		699468.6332		
	930261.3227			
11481		699450.2659		
11482		699426.1026		
	930251.2286	699426.5326		
11484		699415.6132		
		699411.226		
l		699415.7506		
11487		699411.4571	426.092246	rock
11488	930288.8277			
	930307.6468			
11490	930321.1194		426.064121	
11491		699433.6791		
11492	930327.734	699451.4728	425.315269	rock
11493		699467.1619	427.112414	
11497	930150.5104	699409.5403	432.850981	SEL
11498	930283.6523	699473.5031	426.147869	rock
11499	930276.4677	699456.349	425.966354	rock
11500	930437.4572	699603.0425	427.883223	SEL
11501	930431.5424	699575.4571	429.991959	SEL
11502	930423.1754	699579.745	428.672716	SEL
11503	930416.3511	699647.5614	433.124873	sel
	930434.0858			
11505	930416.3299	699629.572	431.020436	sel
11506		699630.4631	432.69216	
	930387.4474			
	930395.6507			
11509	930417.1563	699647.6212	432.5	SEL
11510	930417.1691	699647.83		SEL
-	930436.5839			
	930395.4088	699615.4769		
	930408.8579	699610.0971	428.05	
		699609.5266		
11515		699604.6889		
	930401.8909			
11517	930409.712			
11518	930373.5853	699591.4305	429.43813	
	930385.9493			
11520	930373.9496	699589.9981	429.364158	
11521	930383.5638	699581.0212		SEL
11522	930337.5819	699589.5518	432.017658	
11523	930345.3089	699574.8367	431.773897	
11524	930362.3321	699561.0275	430.230108	
11525	930355.2143	699569.9721	430.552036	
11526	930353.4299	699570.5913	430.575424	
11527	930270.4213	699519.2937	432.166263	
11528	930184.0154	699411.4468	433.384162	
11529	930194.7122	699409.941	433.742136	
11530	930195.6564	699409.8906	432.764313	
11531	930198.1242	699423.5059	433.4	sel

ID I	Northing	Easting	Elevation	Description
11532	930166.6361	699410.5085		
11532		699390.0919	432.641577	
11534	930180.1054		432.634464	
	930300.4336		432.634464	
11535 11536		699445.5918	427.543734	
11536	930306.2838	699445.0853		
l -			427.77	
		699432.3641		
-		699450.8386		
1	930323.1785	699436.7248		
11541	930327.7775	699451.5534		
		699415.2746	427.569	
		699421.0248		
-	930319.3521	699408.4864	426.901	
11545		699432.4085	428.040041	
		699421.3501	427.1	
	930320.3767			
11548	930324.5549	699436.196	428.482816	
11549	930322.7369		425.579538	
		699456.5673	424.895147	
	930311.8608	699448.8314	425.481338	
11552		699431.7565		
l	930324.2099		427.3	_
	930288.6669		427.568692	
		699408.5593	426.765319	
11556		699404.1143		
1		699446.5507		
11558		699445.9968	426.425604	
		699442.1538		
11560	930264.2089	699406.0217		
11561		699412.2237	425.198437	
	930261.8093			
	930260.9044	699406.6559	425.803207	rock
11564	930259.6492	699407.7793	426.51056	rock
11565	930260.4053	699412.6203	426.440466	
11566	930261.3407	699419.3728	426.474246	rock
11567	930271.3111	699417.9904	424.991232	
11568		699411.6097	427.808414	SEL
11569	930270.3514	699403.2083	426.616894	SEL
11570	930290.3988	699391.6526	427.781806	SEL
11571	930277.3302	699377.6409	431.409975	SEL
11572	930278.4658	699378.9804	431.10822	SEL
11573	930284.1455	699385.199		
11574	930290.3852			SEL
11575	930307.1842	699382.8677	426.518579	
11576	930296.5878	699372.0751		inv e24"rcmp
11577	930284.4608	699406.8175	428.37	
11600	930266.8457	699428.7686	426.267773	
11601	930306.2258	699445.706	426.012	rock
11603	930247.0164	699394.9512	428.076452	
11604	930315.7568	699475.6375	426.934981	
11605	930251.141	699395.5649	428.288279	
11606	930267.8077	699393.6854	428.52394	
11607	930284.0903	699385.2282	428.8	
11608	930297.3589	699374.5672	425.671002	
11609	930305.4503	699376.0358	427.524142	

ID	Northing	Easting	Elevation	Description
11700		699363.6756	433.109946	SFI
11701		699351.5697		
	930324.6858			_
11703		699377.8093	432.726596	
-	930329.2224			
	930328.7806			
11706		699404.5569		
11707		699352.4283		
	930270.536			
11709		699423.4071	427.988193	
11721	930300.2727	699465.1123	426.939265	SEL
11722	930299.0366			
11723		699452.1991		
11724	930316.0389			
11725		699463.7778		
11726		699497.3468		
11727		699497.1141		
11729	930337.1679	699466.249	424.473242	bot
11730	930316.2875			
11731	930315.2363	699497.1225	424.424879	bot
11732	930317.6333	699498.5695	425.094272	bot
11733	930333.4703	699498.4371	425.324168	SEL
11735	930337.4001	699477.5775	425.876473	SEL
11736	930370.2532	699505.1609	431.150633	SEL
11737	930367.1571	699504.4523	430.658643	SEL
11738	930371.4983	699503.1641	434.653034	tre 18in
11739	930374.511	699520.6506	429.020996	SEL
11740	930370.8371	699524.0844	428.089855	SEL
11741	930341.2013	699549.1384	427.109476	SEL
11742	930349.9642	699553.158	428.618896	stump
11743	930348.045	699552.0103	427.448399	sel rock
11744	930332.4828	699544.5765	426.801587	sel rock
11745	930324.0557	699538.3892	427.16733	sel rock
11746		699538.7866		
11747		699525.0588		
11748		699532.1285		
	930314.5625			
11750		699530.6459		
11751		699521.0696		
11938		699508.5797		
-	930337.1715			
11940	930317.25	699502.5589	426.555408	
11941	930300.9526	699497.2479	427.760028	
11942	930297.675	699497.2012	427.268262	
11944	930292.7546	699497.0606	426.991246	
11951	930260.5398	699471.2254	426.223953	
11952	930272.088	699483.15	426.5	
11958	930250.621	699445.3308	427.791621	
11959	930229.8814	699428.1137	428.768097	
11960	930247.057	699415.3627	428.047473	
11961	930248.0731	699415.1723	427.09311	
11962	930247.6026	699422.0631	427.369121	rock

#### **Survey Information - Excavation**

ID	Northing	Easting	Elevation	Description
11963	930228.4754	699423.3679	428.230973	SEL
11964	930226.5024	699413.5359	428.216083	SEL
11965	930227.8624	699404.0817	429.133565	SEL
11966	930247.993	699411.4274	427.263198	rock
11967	930228.7053	699393.6644	429.152155	SEL
11968	930224.5076	699381.3006	429.347205	SEL
11969	930212.9001	699368.204	428.862114	SEL
11970	930200.525	699351.779	428.73378	SEL
11975	930247.2824	699390.6621	429.480797	SEL
11976	930257.1363	699442.4149	426.417332	rock
11977	930252.7176	699451.2814	426.98	rock
20000	930327.594	699464.9398	424.159214	samp na71
30000	930422.9623	699634.3182	430.694563	sa97
30001	930352.8225	699590.3426	431.354885	sa90
30002	930312.9393	699587.1149	434.752301	sa85
30003	930198.4586	699371.5035	431.373367	sa69
30004	930299.6056	699422.6234	426.263425	na61
30005	930291.3503	699381.7639	426.412837	na77
30006	930265.2971	699427.3612	426.362038	na65
30007	930377.9559	699529.6716	428.550744	na79 samp
30009	930340.7808	699536.1044	426.171002	sb46 samp

Key for descriptions can be found at the end of Appendix G

ID	Northing	Easting	Elevation	Decription
70000	930478.3728	699993.1509	448.076036	DCP1 ST
70001	930479.5164	699991.2333	447.963666	
70002	930475.857	699984.9196	448.057784	
70003	930468.9155			
70004	930461.6758			
70005	930422.3205	699960.1262	449.40286	
70006	930420.9579	699962.592	449.589873	
70007	930413.3974	699958.3442	449.637443	
70008	930419.1803	699952.6009	449.424579	
70009	930432.8133	699933.3879	449.021125	
70010	930431.7565	699932.5944	449.055755	
70011	930457.2877	699911.6451	447.471417	
70012	930472.4395	699900.6039		
70013	930474.7593		446.065272	
70014	930475.2248	699906.0424	446.0917	
70015	930471.3979	699912.7499	446.54715	
70016	930465.5755	699917.8355	446.943398	
70017	930459.9329		447.490433	
70017	930456.3708		447.676178	
70019	930491.6822	699920.878	445.806912	
70020	930483.7632	699934.8126	446.865538	
70021	930484.6185	699950.4199		
70021	930487.0624			
70023	930493.1789	699960.917	447.068888	
70024	930496.8893	699960.979	446.934956	
70025	930496.8911	699961.4948	446.435833	
70026	930480.0983	699991.2188	447.478097	
70027	930476.2607		447.752351	
70028	930469.1719	699980.4423	447.913977	
70029	930461.7792		448.327934	
70030	930422.1571	699959.4683	449.136907	
70031	930420.7537		449.300403	
70032	930414.3687	699957.813	449.18143	
70033	930419.5738	699952.9577	449.122252	
70034	930433.5591	699933.2113	448.7739	
70035	930431.4278	699931.5771	448.840144	
70036	930430.2414		448.611705	
70037	930437.4255	699917.5109	447.992838	
70038	930451.5583			
70039	930455.799	699915.5332	447.301092	
70040	930459.8076	699919.3492	447.348015	
70041	930465.6869	699918.3671	446.721082	
70042	930471.8936	699912.9728	446.119516	
70043	930489.6386	699923.4648	445.57263	
70044	930483.311	699934.5684	446.565593	
70045	930484.1906	699950.5849	447.011047	
70046	930486.5824	699957.651	447.080383	
70047	930492.8703	699961.3213	446.79519	
70048	930492.589	699932.7795	446.42729	
70049	930493.0535	699938.8619	446.449766	
70050	930497.2332	699940.804	446.455161	
70051	930502.888	699937.3615	446.446744	

ID	Northing	Easting	Elevation	Decription
70052	930518.7531	699907.5125	446.363495	RWL1
70053	930517.9051	699901.953	446.39441	
70054	930514.2814	699900.6208	446.431152	
70055	930508.8928	699903.0555	446.434875	
70056	930507.7266	699901.8307	443.416995	
70057	930491.596	699932.228	445.838587	
70058	930492.3368	699939.7848	445.98818	
70059	930496.9967	699941.9255	445.775359	
70060	930503.9863	699937.9417	445.071797	
70061	930520.5791	699908.0652	442.495802	
70062	930518.9435	699900.6332	442.395236	
70063	930514.4338	699898.8902	442.597736	
70064	930495.2206	699699.8676	437.252636	
70065	930609.8838	699801.0651	439.290082	
70066	930594.969	699752.0102	438.964867	
70067	930599.0325	699749.346	438.976052	
70068	930602.8241	699751.6406	438.973712	
70069	930602.562	699755.8781	438.989473	
70070	930586.416	699789.3249	439.00051	
70071	930568.9058	699825.6657	438.943314	
70072	930566.219	699827.63	438.976379	
70073	930561.6681	699826.9257	438.962026	
70074	930561.0234	699822.3491	438.969632	
70075	930578.863	699785.2386	438.922286	
70076	930577.7819	699784.6484	437.303093	
70077	930593.7231	699751.3249	436.199553	
70078	930598.7073	699748.0532	436.671032	
70079	930603.9213	699751.2435	437.903438	RWLB2
70080	930603.5494	699756.3512	438.392832	
70081	930587.4422	699789.7404	438.371605	
70082	930569.8906	699826.1452	438.316321	RWLB2
70083	930566.5498	699828.7295	437.883756	RWLB2
70084	930560.7462	699827.7103	437.760346	RWLB2
70085	930559.9248	699821.8745	437.664884	RWLB2
70086	930556.1059	699825.1609	437.514757	DCH1 ST
70087	930556.7451	699820.8519	437.258386	DCH1
70088	930575.4745	699783.4716	436.406755	DCH1
70089	930592.9308	699748.691	435.695635	
70090	930595.3998	699736.0291	432.99704	
70091	930592.5741	699739.4645	435.630603	RPR1
70092	930588.8147	699745.5506	436.171178	RPR1
70093	930594.1042	699749.0301	435.8459	RPR1
70094	930594.9317	699749.8758	436.289125	RPR1
70095	930600.7622	699748.1101	437.120126	
70096	930605.3884	699742.1109	435.658225	RPR1
70097	930602.5022	699741.0698	433.858992	
70098	930603.9264	699738.5609	431.013262	
70099	930598.4954	699744.3724	435.881236	
70100	930594.3883	699741.9117	436.065506	SEL
70101	930590.2869	699748.3043	436.505204	
70102	930568.5856	699736.4823	436.468904	CDR1
70103	930561.3232	699749.5548	436.510701	CDR1

ID	Northing	Easting	Elevation	Decription
70104	930583.0307	699761.4193	436.472353	CDR1
70105	930570.3199	699730.1189	435.45397	
70106	930566.428	699730.3698	435.609327	
70107	930568.4359	699736.4373	435.949783	
70108	930561.2257		436.186991	
70109	930583.0709	699761.5504	436.122264	
70110	930590.4356	699748.394	436.129034	
70111	930590.8455	699748.6123	436.028145	
70112	930573.1951	699782.2813	436.744079	
70113	930553.6487	699820.1623	437.4609	
70114	930553.4766	699828.1576	437.688559	
70115	930562.5408		437.776687	
70116	930567.5027	699828.8274	437.989457	
70117	930574.9521	699828.23	439.015931	
70118	930565.6652	699845.8159		
70119	930561.4768	699849.183	439.369517	
70113	930542.3156	699885.0998	440.728609	
70121	930508.4454	699855.6322	440.14433	
70121	930468.4527		440.470112	
70122	930437.0259	699798.877	442.074518	
70123	930415.023		443.740125	
70124	930381.0544		445.49985	
70126	930388.7485		444.830185	
70120	930403.6797		444.176856	
70127	930408.8573	699764.5661	442.622778	
70128	930408.8373	699771.0292	443.497104	
70129	930430.7941	699776.7786	441.845394	
70130	930461.3396		440.401338	
70131	930498.166		439.203844	
70132	930525.0486	699827.7495		SDR2 RWLB3 ST
70133	930525.5177	699826.7646	438.122357	
70134	930469.6022		438.918315	
70136	930411.2213	699763.846	439.573517	
70130	930423.4126	699741.3401		RWLB3 SDR3 ST
70137	930442.222	699705.9317	438.313364	
70138	930412.0338	699691.3112	438.081044	
70139	930427.0734			
70140	930458.4067	699675.8761	437.694259	
70141	930517.8568			SDR3 SDR2
70142	930477.4094	699719.7452	437.863927	
70143	930506.7207	699757.8124	437.924816	
70144	930536.018	699785.951	437.634412	
70146	930524.8078	699827.661	438.900911	
70140	930520.5214	699825.3095	438.919868	
70147	930520.3409	699825.318	439.569083	
70149	930491.5718	699809.4332	439.552262	
70150	930491.3731	699809.4445	440.163954	
70151	930468.9865	699797.166	440.222575	
70151	930468.7668	699797.2177	440.842771	
70153	930454.0725	699789.0649	441.016525	
70153	930454.0725	699789.0602	441.641152	
70154	930442.8502	699783.1158	441.5692	
70100	930442.0302	0311.60.1138	441.3092	IVVLO

ID	Northing	Easting	Elevation	Decription
70156	930442.6269	699783.1963	442.213833	RWL3
70157	930425.3565	699773.4993	442.319906	
70158	930425.0996	699773.5394	442.921714	
70159	930408.9046	699764.5091	442.841248	RWL3
70160	930411.6453	699759.3277	442.848995	
70161	930411.8941	699759.2115	442.213274	
70162	930414.4453	699754.5803	442.228306	
70163	930414.667	699754.4398	441.593695	RWL3
70164	930417.0512	699750.0656	441.568067	RWL3
70165	930417.2479	699749.9826	440.941208	RWL3
70166	930419.1052	699746.7692	440.947673	RWL3
70167	930419.2652	699746.6315	440.318137	RWL3
70168	930422.323		440.262229	RWL3
70169	930609.888	699801.0679	439.290885	CHK1
70170	930609.786	699753.9936	439.459131	
70171	930592.6506	699792.3006	439.158613	
70172	930535.3345	699899.0422	441.388109	EP1
70173	930533.9651	699907.3287	441.949586	EP1
70174		699945.9151	444.811162	
70175	930525.9432	699830.0208	438.46589	
70176	930469.0637	699798.884	440.248915	FNC1
70177	930407.1708	699764.9645	443.015911	FNC1
70178	930421.5015	699739.1241	439.577739	FNC1
70179	930402.7691	699755.1734	443.46265	
70180	930395.6706	699751.4807	443.458641	
70181	930397.654	699747.9512	442.976337	
70182	930404.7119	699751.6905	442.962938	
70183	930406.6893		442.441817	
70184	930399.5762	699744.4563	442.512896	
70185	930401.4577	699741.0486	442.036821	
70186	930408.6112	699744.7736	441.987693	
70187	930410.5763	699741.3158	441.435704	
70188	930403.431	699737.5697	441.592288	
70189	930405.336	699734.1071	440.990591	
70190	930412.4455	699737.7662	440.912278	
70191	930414.27	699734.3568	440.429553	
70192	930407.171			
70193	930225.9045		444.278751	
70194	930272.3083	699723.355	442.958757	
70195	930308.3044	699738.6965	444.730158	
70196	930357.4511	699754.363	445.426424	
70197	930382.3483	699718.2503	440.396559	
70198	930395.4196	699689.9259	436.738305	
70199	930395.6348	699656.8603	434.783468	
70200	930417.3004	699790.3716	444.070785	
70201	930360.6813	699788.9064	446.438851	
70202	930325.3572	699793.7377	446.176428	
70203	930262.6825	699783.4877	448.366262	
70204	930219.0281	699827.8465	447.798033	
70205	930189.729	699819.9943	445.842539	
70206	930170.8664	699798.2172	445.188424	
70207	930151.5521	699750.0722	443.745698	SMA2

ID	Northing	Easting	Elevation	Decription
70208	930134.0818	699707.7292	443.719445	SMA2
70209	930424.3443	699737.2547	438.923988	
70210		699733.8743		
70211	930414.4682	699734.4371		
70212	930400.9597	699758.0468		
70213		699754.8923	443.45451	
70214	930408.3798	699728.6349	440.239077	
70215	930414.2248	699726.1242	439.742329	SMA3
70216		699731.0633		SMA3 ELB1 ST
70217	930441.0155	699706.2591	438.623659	
70218		699691.7281	438.973009	
70219		699671.634		
70220				
70221		699675.1423		
70222	930517.9409	699708.0693		
70223	930568.6872	699735.9706	436.290915	
70224	930583.115	699732.2401	435.563782	
70225	930537.0083	699707.2177	435.673009	
70226		699692.2421		_
70227				
70228		699676.6063		
70229	930482.0833	699674.8017	436.818642	
70230		699672.288		
70231	930475.9907	699670.0985		
70232	930472.1189	699667,7722	436.863503	
70233	930464.9029	699663.2048	436.60314	
70234	930461.6532	699661.1219	436.520472	
70235		699659.2764		
70236		699656.8787	436.207957	
70237	930451.5549	699655.1231	436.053007	
70238	930448.3271	699652.8869		
70239	930445.3846	699650.9055	435.317357	
70240	930442.264	699648.7153	434.808551	CSH 3"
70241	930438.1561	699646.902	434.56534	
70242	930469.228	699665.8709	436.697155	CST 3"
70243	930423.3618	699721.691	438.350749	
70244	930407.7099	699706.5877	437.368364	ELB2
70245	930399.7023	699690.7293	436.525138	ELB2
70246	930401.0474	699675.24	435.134501	ELB2
70247	930404.9075	699653.921	434.32475	ELB2
70248	930490.1392	699675.5614	436.018888	ELB3 ST
70249	930468.4291	699660.327	435.982494	ELB3
70250	930448.7505	699649.6372	434.956426	ELB3
70251	930444.1036	699641.2324		ELB3 RPR2 ST
70252	930422.5251	699625.6323	432.423878	ELB3
70253	930402.8354	699606.1301	432.765536	ELB3
70254	930385.8136	699588.2124	432.244668	ELB3
70255	930371.1458	699575.2773	432.171127	ELB3
70256	930392.4652	699645.819	434.335298	HDG1 ST
70257	930402.8256	699647.5631	434.206932	HDG1
70258	930422.4214	699643.851	434.345295	HDG1
70259	930435.864	699639.5001	433.534259	HDG1

ID	Northing	Easting	Elevation	Decription
70260	930419.7912	699626.0607	432.780546	HDG1
70261	930392.1175	699599.7785	432.836317	
70262	930370.292	699579.6186	432.599078	
70263	930397.5528			
70264	930383.7043	699616.1307	433.948668	
70265	930376.6061	699608.3199	434.069755	
70266	930381.6146	699601.7261	433.448356	TRF 2"
70267	930382.1995	699646.9777		CLF1 ST 12
70268	930389.0481	699635.4134	434.619449	
70269	930384.2258	699622.1517	434.373547	
70270	930357.9472	699605.7625	434.419874	
70271	930351.9878	699621.8677	440.018778	
70271	930338.0659	699585.6501	433.209755	
70272	930340.1686	699577.7605	432.899535	
70274	930441.1035	699637.6589	432.448895	
70275	930442.6506	699634.2491	431.04401	
70276	930435.2101	699630.2789	431.130779	
70277	930435.5071	699613.6956	431.005146	
70277	930390.0268	699589.0696	430.949784	
70279	930390.0200	699573.405	430.945611	
70280	930371.2817	699574.9725	432.085602	
70281	930353.5226			RPR3 ELB3
70282	930347.039			RPR3 ELB3
70283	930350.7421	699562.0386	431.798499	
70284	930356.2647	699586.4913	432.962347	
70285	930408.6885	699632.5974	433.709267	
70286	930186.9785	699450.9561	436.273682	
70287	930079.8512	699669.6047		
70288	930037.5514		445.018358	
70289	929959.1191	699614.0779	444.811757	
70290	929866.9004		444.302353	
70291	929897.7515	699486.3866	446.331237	
70292	929918.4604		446.026093	
70293	929951.0764	699445.6784	445.586439	
70294	929974.8842	699460.4768	446.559821	
70295	930002.5285	699470.5134	446.242916	
70296	930028.0643		446.368812	
70297	930031.657	699425.0666	445.020076	
70298	930048.1003	699416.1393	444.792047	
70299	930056.0114	699419.4937	444.544554	
70300	930056.0508	699433.4589	444.298171	
70301	930026.4948	699479.1625	446.131319	
70302	930018.8093	699498.7548	446.328424	
70303	930028.2517	699531.3735	444.016759	
70304	930074.6427	699567.8404	445.161244	
70305	930057.4506	699431.7112	444.884687	
70306	930057.1338	699423.7064	444.930296	
70307	930063.064	699423.8262	444.059594	
70308	930062.0033	699431.7415	443.996743	
70309	930066.8218	699432.6803	442.955338	
70303	930068.8892	699424.9285	443.100815	
70310	930074.5983	699426.0778	442.045421	
70011	JJJJJ 7.JJJJJ	000420.0110	774.070741	Oti 1 1

ID	Northing	Easting	Elevation	Decription
70312	930071.7259	699433.598	442.059222	str11
70313	930076.4185	699434.7515	441.100695	
70314	930080.4086	699427.7655	441.036617	
70315	930085.3424		440.040465	
70316	930080.5152		440.129812	
70317	930089.3656	699434.0308	438.998828	
70318	930093.4422	699437.0522	438.012229	
70319	930097.2927	699440.1095	437.123962	
70320	930100.5293	699452.3123	435.023826	
70321	930187.2648		436.25511	
70322	930448.8541	699633.4593	429.745742	
70323	930430.978		429.52109	
70324	930412.023		429.402366	
70325			429.375887	
70326	930375.1057	699569.0506	429.12275	
70327	930369.7376	699561.4356	428.695916	
70328	930359.4762	699552.7415	428.786699	
70329	930351.8605	699550.6434	429.278189	
70330	930334.8077		429.132766	
70331	930314.079		429.364073	
70332	930300.6652	699517.254	429.434584	
70333	930275.8253		429.372563	
70334		699486.2101	429.101471	
70335	930249.6481	699478.2243	429.43042	
70336	930243.0946	699462.1982	429.51795	
70337	930235.9752	699438.0679	429.245703	
70338	930233.0792	699430.0097	428.759087	
70339	930229.7727		428.88457	
70340	930229.014		429.324177	
70341	930219.606	699378.993	429.654516	
70342	930206.6503		429.131126	
70343	930191.4381	699333.4999	429.182831	
70344	930184.8641	699325.6016	429.102826	
70345	930347.9524	699554.2514	431.029164	
70346	930331.1455	699545.0271	430.862903	
70347	930317.8843		430.959834	
70348	930307.2369		430.862705	
70349	930291.1677	699515.6658	430.827738	-
70350	930273.7834		430.807071	
70351	930270.157	699508.0223	432.820685	•
70352	930256.704	699497.4574	433.0786	
70353	930246.2938	699489.3625	432.807981	•
70354	930240.3623	699480.5705	432.382184	
70355	930233.6868	699459.4143	431.601244	•
70356	930230.1982	699440.3578	430.957482	
70357	930227.0133	699429.5272	430.864291	•
70358	930222.356	699416.7203	430.947638	rpr2 elb3
70359	930223.0011	699403.2096	431.39295	
70360	930214.298	699382.3225	431.565454	
70361	930213.8944	699378.7632	431.120731	•
70362	930207.6345	699364.74	430.872248	
70363	930197.3342	699351.2008	431.071725	

	ID	Northing	Easting	Elevation	Decription
70365 930346.5916 699556.7446 431.660484 elb3 70366 930328.9387 699545.8396 432.018095 elb3 70367 930312.2185 699533.8539 432.018095 elb3 70368 930303.4138 699526.3914 432.541106 elb3 70369 930282.696 699515.9715 432.908411 elb3 70370 930241.4467 699471.7086 431.985616 elb3 70371 930235.4681 699455.5851 431.429962 elb3 70372 930194.9401 699377.0371 432.664525 elb3 70373 930176.2639 699364.8547 433.306675 elb3 70373 930176.2639 699364.8547 433.306675 elb3 70373 930321.3446 699546.2236 432.139796 HDG1 70375 930302.536 699530.2325 433.268175 HDG1 70376 930273.7243 699515.479 433.569198 HDG1 70377 930250.546 699489.2939 433.329086 HDG1 70378 930238.0635 699484.9102 433.187365 HDG1 70378 930229.5083 699460.4548 432.224704 HDG1 70380 930229.5083 699460.4548 432.224704 HDG1 70381 930229.5083 699404.4969 432.309766 HDG1 70383 930219.5955 699426.3862 430.98224 HDG1 70383 930219.47316 699391.3893 432.05926 HDG1 70384 930205.491 699370.9961 431.632154 HDG1 70385 930186.2638 699384.1075 432.391866 tre 2" 70388 930211.8955 699406.6801 432.754088 tre 2" 70389 930229.5083 699384.1075 432.391866 tre 2" 70389 930213.038 699314.8949 432.309766 HDG1 70380 930215.7966 699586.6376 435.596278 tre 2" 70391 930209.5576 699536.6376 435.596278 tre 2" 70399 930309.2657 699536.6376 435.596278 tre 2" 70399 930309.2657 699536.6363 433.197325 tre 2" 70399 930309.2657 699536.6364 438.189504 SMA3 70400 930315.6972 699547.8297 433.010525 tre 2" 70399 930309.2657 69956.6484 438.189504 SMA3 70400 930312.699 699555.7893 439.209586 SMA3 70400 930312.699 699555.7893 439.209586 SMA3 70400 930314.6761 699309.2562 433.4346585 SMA4 70401 930315.5646 699338.15978 433.466856 SMA3 70400 930215.41296 699532.164 435.60868 SMA3 70400 930215.1325 69950.4681 436.63665 SMA3 70400 930215.1325 69950.4681 436.63665 SMA3 70400 930314.65646 699390.2562 433.434544 SMA4 70411 930155.4208 699530.4633 434.55502 SMA4 70401 930145.	70364	930186.6511	699336.816	430.63245	shl1
70366 930328.9387 699545.8396 432.018095 elb3 70367 930312.2185 699533.8539 432.691822 elb3 70368 930303.4138 699526.3914 432.541106 elb3 70369 930282.696 699515.9715 432.908411 elb3 70370 930241.4467 699471.7086 431.985616 elb3 70371 930235.4681 699453.5851 431.429962 elb3 70372 930194.9401 699377.0371 432.664525 elb3 70373 930176.2639 699364.8647 433.306675 elb3 70374 930321.3446 699546.2236 432.139796 HDG1 70375 930302.536 699530.2325 433.268175 HDG1 70376 930273.7243 699515.479 433.569198 HDG1 70377 930250.546 699498.2939 433.329068 HDG1 70378 930220.536 699484.9102 433.187365 HDG1 70379 930225.583 699460.4548 432.224704 HDG1 70379 930225.9583 699460.4548 432.224704 HDG1 70380 930228.9691 699346.7111 431.343274 HDG1 70381 930219.9596 69946.3862 430.98224 HDG1 70382 930218.4701 699404.4969 432.309756 HDG1 70388 930214.7316 699391.3893 432.05926 HDG1 70388 930186.2638 69930.9981 431.197317 HDG1 70386 930186.2638 69930.9985 431.197317 HDG1 70387 93020.68616 699384.0758 431.197317 HDG1 70388 930186.2638 69930.9981 432.69926 HDG1 70388 930118.7316 699391.3893 432.05926 HDG1 70388 9301556698 699406.8601 432.754088 tre 2" 70389 930215.4139 699365.511 431.602508 tre 2" 70389 930215.4139 699408.4894 432.379826 tre 2" 70389 930215.4139 699408.6801 432.754088 tre 2" 70389 930215.4139 699408.6801 432.754088 tre 2" 70390 93026.8616 699384.1075 432.391866 tre 2" 70391 93029.556 699529.1533 433.742352 tre 2" 70392 930300.2657 699536.6376 435.595278 tre 2" 70393 930309.4083 699648.6663 437.352395 clf1 07 70396 930318.5972 699548.897 433.010525 tre 2" 70398 930319.24766 699567.2659 4351.41 SMA3 70400 930312.4766 69957.2659 435.141 SMA3 70401 930301.24766 69957.7259 433.0105208 SMA3 70400 930312.4766 69957.2659 435.141 SMA3 70401 930315.5926 699580.938 438.702928 SMA3 70400 930312.4766 69957.7259 433.010520 SMA3 70400 930312.4766 69957.2659 435.141 SMA3 70401 930315.54208 699530.935 435.6488 SMA3 70402 930293.3051 699546.041 439.40629 SMA3 70404 930297.3949 699556.0681 436.6207 SMA3 70404 930316.666 69938.147775 436.66207 SM					
70367         930312.2185         699533.8539         432.691822         elb3           70368         930303.4138         699526.3914         432.541106         elb3           70369         930281.696         699515.9715         432.908411         elb3           70370         930241.4467         699471.7086         431.985616         elb3           70371         930235.4681         699471.7086         431.429962         elb3           70372         930194.9401         699377.0371         432.664525         elb3           70373         930321.3446         699546.2236         432.139796         HDG1           70374         930321.3446         699546.2236         432.139796         HDG1           70375         9302321.3446         699550.2325         433.569198         HDG1           70376         930225.546         699498.2939         433.329068         HDG1           70377         930229.5083         69940.4548         432.224704         HDG1           70380         930228.6861         699446.7111         431.343274         HDG1           70381         930218.4701         699404.8969         432.39186         HDG1           70384         930215.491         69937.393 <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
70368         930303.4138         699526.3914         432.908411         elb3           70369         930282.696         699515.9715         432.908411         elb3           70370         930241.4467         699471.7086         431.985616         elb3           70371         930235.4681         699452.5861         431.429962         elb3           70372         930194.9401         699377.0371         432.664525         elb3           70373         930176.2639         699364.8547         433.306675         elb3           70374         930321.3446         699546.2236         432.139796         HDG1           70375         930302.536         699530.2325         433.569198         HDG1           70376         930273.7243         699515.479         433.569198         HDG1           70377         930225.0563         699484.9102         433.187365         HDG1           70379         930222.5083         699460.4548         432.224704         HDG1           70380         930225.0993         699426.3862         430.98224         HDG1           70381         930218.4701         69940.4369         432.309756         HDG1           70382         930218.47316         699340.9785					
70369         930282.696         699515.9715         432.908411         elb3           70370         930241.4467         699471.7086         431.955616         elb3           70371         930236.8681         699453.8651         431.429962         elb3           70372         930194.9401         699377.0371         432.664525         elb3           70373         930176.2639         699364.8547         433.306675         elb3           70374         930321.3446         699546.2236         432.139796         HDG1           70375         930302.536         69950.2325         433.268175         HDG1           70376         930273.7243         699515.479         433.569198         HDG1           70377         930225.5686         699488.2939         433.329068         HDG1           70378         930228.6656         699484.9102         433.187365         HDG1           70379         930229.5083         699466.3862         430.38274         HDG1           70380         930218.6701         699426.3862         430.98224         HDG1           70381         930214.7316         699426.3862         430.98224         HDG1           70382         930214.801         699370.9961					
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70371         930235.4681         699453.5851         431.429962         elb3           70372         930194.9401         699377.0371         432.664525         elb3           70373         930176.2639         699364.8547         433.306675         elb3           70374         930321.3446         699546.2236         432.139796         HDG1           70375         930302.536         699530.2325         433.569198         HDG1           70376         930273.7243         699515.479         433.569198         HDG1           70377         930250.546         699482.2939         433.329068         HDG1           70378         930238.0635         699446.7111         431.343274         HDG1           70380         930226.9691         699446.7111         431.343274         HDG1           70381         930218.4701         699404.4969         432.309756         HDG1           70382         930218.4701         699404.4969         432.309756         HDG1           70383         930214.7316         699370.9961         431.632154         HDG1           70384         930218.303         432.309756         HDG1           70385         930186.2638         699340.9785         431.197317         <					
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70374         930321.3446         699546.2236         432.139796         HDG1           70375         930302.536         699530.2325         433.268175         HDG1           70376         930273.7243         699515.479         433.569198         HDG1           70377         930250.546         699498.2939         433.329068         HDG1           70378         930238.0635         699484.9102         433.187365         HDG1           70379         930229.5083         699460.4548         432.224704         HDG1           70380         930226.9691         699446.7111         431.343274         HDG1           70381         930218.4701         699404.4969         432.309756         HDG1           70382         930218.4701         699391.3893         432.05926         HDG1           70383         930214.7316         699391.3893         432.05926         HDG1           70384         930205.491         699370.9961         431.697317         HDG1           70386         930191.2813         699385.303         433.367432         tre 2"           70387         930206.8616         699384.1075         432.391866         tre 2"           70388         930211.3038         69940.6801	-				
70375 930302.536 699530.2325 433.268175 HDG1 70376 930273.7243 699515.479 433.569198 HDG1 70377 930250.546 699498.2939 433.329068 HDG1 70378 930228.0635 699484.9102 433.187365 HDG1 70379 930229.5083 699460.4548 432.224704 HDG1 70380 930226.9691 699446.7111 431.343274 HDG1 70381 930219.9595 699426.3862 430.98224 HDG1 70382 930218.4701 699404.4969 432.309756 HDG1 70383 930214.7316 6993391.3893 432.05926 HDG1 70384 930205.491 699370.9961 431.632154 HDG1 70385 930186.2638 699340.9785 431.197317 HDG1 70386 930191.2813 699385.303 431.197317 HDG1 70387 930206.8616 699384.1075 432.391866 tre 2" 70388 930211.8955 699400.6801 432.754088 tre 2" 70390 930215.4139 699426.5511 431.602508 tre 2" 70390 930215.4139 699426.5511 431.602508 tre 2" 70391 93029.1556 699529.1533 433.742352 tre 2" 70392 930300.2657 699536.6376 435.595278 tre 2" 70394 930316.5972 699547.3863 435.002802 tre 2" 70399 930348.483 699631.7057 441.49232 clf1 70396 930357.5931 699648.6663 437.352395 clf1 10 70397 930346.2645 699597.1932 434.066456 SMA3 ST 70399 930297.3949 699566.448 438.189504 SMA3 70400 930312.4766 699557.1932 434.066456 SMA3 ST 70399 930293.3051 699546.041 439.447629 SMA3 70401 9303293.3051 699546.041 439.447629 SMA3 70400 930312.4766 699557.1932 434.066456 SMA3 70401 930309.4495 699555.7893 439.209586 SMA3 70400 930312.4766 699557.2659 435.1414 SMA3 70400 930312.4766 699557.7932 434.066456 SMA3 70401 930293.3051 699546.041 439.447629 SMA3 70400 930312.4766 699557.6659 435.1414 SMA3 70400 930312.4766 699557.7659 435.60366 SMA3 70400 930213.1936 699557.7659 435.60366 SMA3 70400 930215.4296 699552.164 435.603866 SMA3 70400 930315.5906 6995567.2659 435.1414 SMA3 70401 930301.2699 699555.7893 439.209586 SMA3 70400 930315.5906 699550.7669 435.1414 SMA3 70401 930301.2699 699555.7893 439.209586 SMA3 70400 930315.5906 699550.7669 435.1414 SMA3 70401 930301.2699 699550.7669 435.1414 SMA3 70401 930315.5646 699390.2562 433.434544 SMA4 70410 93045.5646 699390.2562 433.434544 SMA4 70410 930145.5646 699390.2562 433.434544 SMA4 70410 930145.5646 699390.2					
70376         930273.7243         699515.479         433.569198         HDG1           70377         930250.546         699498.2939         433.329068         HDG1           70378         930238.0635         699484.9102         433.187365         HDG1           70379         930229.5083         699460.4548         432.224704         HDG1           70380         930226.9691         699446.7111         431.343274         HDG1           70381         930219.9595         699426.3862         430.98224         HDG1           70382         930214.7316         699391.3893         432.05926         HDG1           70383         930214.7316         699391.3893         432.05926         HDG1           70384         930205.491         699370.9961         431.632154         HDG1           70385         930186.2638         699340.9785         431.197317         HDG1           70386         930191.2813         699385.303         433.367432         tre 2"           70387         930206.8616         699384.1075         432.391866         tre 2"           70389         930213.1038         699406.6501         432.75828         tre 2"           70390         930215.4139         699426.5511	II				
70377         930250.546         699498.2939         433.329068         HDG1           70378         930238.0635         699484.9102         433.187365         HDG1           70379         930229.5083         699460.4548         432.224704         HDG1           70380         930226.9691         699446.7111         431.343274         HDG1           70381         930218.4701         699404.4969         432.309756         HDG1           70382         930218.4701         699404.4969         432.309756         HDG1           70383         930214.7316         699370.9961         431.632154         HDG1           70384         930205.491         699370.9961         431.632154         HDG1           70386         930191.2813         699384.0785         431.197317         HDG1           70386         930191.2813         699384.1075         432.391866         tre 2"           70387         930206.8616         699384.1075         432.478829         tre 2"           70388         930213.1038         699414.8494         432.478829         tre 2"           70399         930215.4139         699426.5511         431.602508         tre 2"           70391         930299.1556         699529.1533 <td></td> <td></td> <td></td> <td></td> <td></td>					
70378         930238.0635         699484.9102         433.187365         HDG1           70379         930229.5083         699460.4548         432.224704         HDG1           70380         930226.9691         699446.7111         431.343274         HDG1           70381         930218.955         699426.3862         430.98224         HDG1           70382         930218.4701         699404.4969         432.309756         HDG1           70383         930214.7316         699391.3893         432.05926         HDG1           70384         930205.491         699370.9961         431.632154         HDG1           70385         930186.2638         699340.9785         431.197317         HDG1           70386         930191.2813         699388.1075         432.391866         tre 2"           70387         930206.8616         699384.1075         432.391866         tre 2"           70388         930211.8955         699400.6801         432.754088         tre 2"           70399         930215.4139         699426.5511         431.602508         tre 2"           70390         930215.493         699529.1533         433.742352         tre 2"           70391         930390.94083         699547.3863 <td></td> <td></td> <td></td> <td></td> <td></td>					
70379         930229.5083         699460.4548         432.224704         HDG1           70380         930226.9691         699446.7111         431.343274         HDG1           70381         930219.595         699426.3862         430.98224         HDG1           70382         930218.4701         699404.4969         432.309756         HDG1           70383         930214.7316         699381.3893         432.05926         HDG1           70384         930205.491         699370.9961         431.632154         HDG1           70385         930186.2638         699340.9785         431.197317         HDG1           70386         930191.2813         699385.303         433.367432         tre 2"           70386         930206.8616         699384.1075         432.391866         tre 2"           70388         930211.8955         699400.6801         432.754088         tre 2"           70389         930215.4139         699426.5511         431.602508         tre 2"           70390         930299.1556         699529.1533         433.742352         tre 2"           70391         930299.1556         699547.3863         435.595278         tre 2"           70392         930316.5972         699547.3897 <td></td> <td></td> <td></td> <td></td> <td></td>					
70380         930226.9691         699446.7111         431.343274         HDG1           70381         930219.9595         699426.3862         430.98224         HDG1           70382         930218.4701         699404.4969         432.309756         HDG1           70383         930214.7316         699391.3893         432.05926         HDG1           70384         930205.491         699370.9961         431.632154         HDG1           70385         930186.2638         699340.9785         431.197317         HDG1           70386         930191.2813         699385.303         433.367432         tre 2"           70387         930206.8616         699384.1075         432.391866         tre 2"           70388         930213.1038         699440.6801         432.754088         tre 2"           70389         930213.1038         6994426.5511         431.602508         tre 2"           70391         930291.556         699529.1533         433.742352         tre 2"           70392         930300.2657         699536.6376         435.595278         tre 2"           70393         930309.9083         699547.3863         435.002802         tre 2"           70394         930357.5931         699546.6663					
70381         930219.9595         699426.3862         430.98224         HDG1           70382         930218.4701         699404.4969         432.309756         HDG1           70383         930214.7316         699391.3893         432.05926         HDG1           70384         930205.491         699370.9961         431.632154         HDG1           70385         930186.2638         699340.9785         431.197317         HDG1           70386         930191.2813         699385.303         433.367432 tre 2"           70387         930206.8616         699384.1075         432.391866 tre 2"           70388         930213.1038         699414.8494         432.478829 tre 2"           70390         930215.4139         699426.5511         431.602508 tre 2"           70391         930299.1556         699536.6376         435.595278 tre 2"           70392         930300.2657         699536.6376         435.595278 tre 2"           70393         930316.5972         699547.8297         433.010525 tre 2"           70394         930316.5972         699547.8297         433.010525 tre 2"           70395         930348.483         699631.7057         441.49232 clf1           70396         930357.5931         69964.48					
70382         930218.4701         699404.4969         432.309756         HDG1           70383         930214.7316         699391.3893         432.05926         HDG1           70384         930205.491         699370.9961         431.632154         HDG1           70385         930186.2638         699340.9785         431.197317         HDG1           70386         930191.2813         699385.303         433.367432         tre 2"           70387         930206.8616         699384.1075         432.391866         tre 2"           70389         930213.1038         699414.8494         432.478829         tre 2"           70390         930215.4139         699426.5511         431.602508         tre 2"           70391         930299.1556         699529.1533         433.742352         tre 2"           70392         930300.2657         699536.6376         435.595278         tre 2"           70392         930300.2657         699547.8297         433.010525         tre 2"           70394         930316.5972         699547.8297         433.010525         tre 2"           70395         930348.483         699631.7057         441.49232         clf1           70396         930357.5931         699648.666					
70383         930214.7316         699391.3893         432.05926         HDG1           70384         930205.491         699370.9961         431.632154         HDG1           70385         930186.2638         699340.9785         431.197317         HDG1           70386         930191.2813         699385.303         433.367432         tre 2"           70387         930206.8616         699384.1075         432.391866         tre 2"           70388         930211.8955         699400.6801         432.754088         tre 2"           70389         930213.1038         699414.8494         432.478829         tre 2"           70390         930215.4139         699426.5511         431.602508         tre 2"           70391         930299.1556         699529.1533         433.742352         tre 2"           70392         930300.2657         699536.6376         435.595278         tre 2"           70393         930316.5972         699547.3863         435.002802         tre 2"           70395         930348.483         699631.7057         441.49232         clf1           70396         930379.3949         699597.1932         434.066456         SMA3 ST           70398         930319.3927         699606.					
70384         930205.491         699370.9961         431.632154         HDG1           70385         930186.2638         699340.9785         431.197317         HDG1           70386         930191.2813         699385.303         433.367432         tre 2"           70387         930206.8616         699384.1075         432.391866         tre 2"           70388         930211.8955         699400.6801         432.754088         tre 2"           70389         930213.1038         699444.8494         432.478829         tre 2"           70390         930215.4139         699426.5511         431.602508         tre 2"           70391         930299.1556         699529.1533         433.742352         tre 2"           70392         930300.2657         699536.6376         435.595278         tre 2"           70393         930309.4083         699547.3863         435.002802         tre 2"           70394         930316.5972         699547.8297         433.010525         tre 2"           70395         930348.483         699631.7057         441.49232         clf1           70396         930357.5931         699648.6663         437.352395         clf1 10           70398         930319.3927         6996					
70385         930186.2638         699340.9785         431.197317         HDG1           70386         930191.2813         699385.303         433.367432         tre 2"           70387         930206.8616         699384.1075         432.391866         tre 2"           70388         930211.8955         699400.6801         432.754088         tre 2"           70389         930213.1038         699414.8494         432.478829         tre 2"           70390         930215.4139         699426.5511         431.602508         tre 2"           70391         930299.1556         699529.1533         433.742352         tre 2"           70391         930299.1556         699536.6376         435.595278         tre 2"           70392         930300.2657         699536.6376         435.595278         tre 2"           70393         930316.5972         699547.8297         433.010525         tre 2"           70394         930316.5972         699547.8297         433.010525         tre 2"           70395         930348.483         699631.7057         441.49232         clf1           70397         930346.2645         699597.1932         433.066456         SMA3           70398         930319.3927         6996	II				
70386         930191.2813         699385.303         433.367432         tre 2"           70387         930206.8616         699384.1075         432.391866         tre 2"           70388         930211.8955         699400.6801         432.754088         tre 2"           70389         930213.1038         699414.8494         432.478829         tre 2"           70390         930215.4139         699426.5511         431.602508         tre 2"           70391         930299.1556         699529.1533         433.742352         tre 2"           70392         930300.2657         699536.6376         435.595278         tre 2"           70392         930300.94083         699547.3863         435.002802         tre 2"           70394         930316.5972         699547.8297         433.010525         tre 2"           70395         930348.483         699631.7057         441.49232         clf1           70396         930357.5931         699648.6663         437.352395         clf1 10           70397         930346.2645         699597.1932         434.066456         SMA3           70398         930319.3927         699606.448         438.189504         SMA3           70400         930312.4766         699					
70387         930206.8616         699384.1075         432.391866         tre 2"           70388         930211.8955         699400.6801         432.754088         tre 2"           70389         930213.1038         699414.8494         432.478829         tre 2"           70390         930215.4139         699426.5511         431.602508         tre 2"           70391         930299.1556         699529.1533         433.742352         tre 2"           70392         930300.2657         699536.6376         435.595278         tre 2"           70393         930309.4083         699547.3863         435.002802         tre 2"           70394         930316.5972         699547.8297         433.010525         tre 2"           70395         930348.483         699637.7057         441.49232         clf1           70396         930357.5931         699648.6663         437.352395         clf1 10           70397         930346.2645         699597.1932         434.066456         SMA3           70398         930319.3927         699606.448         438.189504         SMA3           70400         930312.4766         699586.9398         438.702928         SMA3           70401         930301.2699         69955	II				
70388         930211.8955         699400.6801         432.754088         tre 2"           70389         930213.1038         699414.8494         432.478829         tre 2"           70390         930215.4139         699426.5511         431.602508         tre 2"           70391         930299.1556         699529.1533         433.742352         tre 2"           70392         930300.2657         699536.6376         435.595278         tre 2"           70393         930309.4083         699547.3863         435.002802         tre 2"           70394         930316.5972         699547.8297         433.010525         tre 2"           70395         930348.483         699631.7057         441.49232         clf1           70396         930357.5931         699648.6663         437.352395         clf1 10           70397         930346.2645         699597.1932         434.066456         SMA3 ST           70398         930319.3927         699606.448         438.189504         SMA3           70400         930312.4766         699567.2659         435.1414         SMA3           70401         930301.2699         699555.7893         439.209586         SMA3           70402         930293.3051         699530	II				
70389         930213.1038         699414.8494         432.478829         tre 2"           70390         930215.4139         699426.5511         431.602508         tre 2"           70391         930299.1556         699529.1533         433.742352         tre 2"           70392         930300.2657         699536.6376         435.595278         tre 2"           70393         930309.4083         699547.3863         435.002802         tre 2"           70394         930316.5972         699547.8297         433.010525         tre 2"           70395         930348.483         699631.7057         441.49232         clf1           70396         930357.5931         699648.6663         437.352395         clf1 10           70397         930346.2645         699597.1932         434.066456         SMA3 ST           70398         930319.3927         699606.448         438.189504         SMA3           70400         930312.4766         699567.2659         435.1414         SMA3           70401         930301.2699         699555.7893         439.209586         SMA3           70402         930293.3051         699540.041         439.447629         SMA3           70403         930284.4795         699532.16					
70390         930215.4139         699426.5511         431.602508 tre 2"           70391         930299.1556         699529.1533         433.742352 tre 2"           70392         930300.2657         699536.6376         435.595278 tre 2"           70393         930309.4083         699547.3863         435.002802 tre 2"           70394         930316.5972         699547.8297         433.010525 tre 2"           70395         930348.483         699631.7057         441.49232 clf1           70396         930357.5931         699648.6663         437.352395 clf1 10           70397         930346.2645         699597.1932         434.066456 SMA3 ST           70398         930319.3927         699606.448         438.189504 SMA3           70400         930312.4766         699567.2659         435.1414 SMA3           70401         930301.2699         699555.7893         439.209586 SMA3           70402         930293.3051         699546.041         439.447629 SMA3           70403         930284.4795         699532.164         435.603866 SMA3           70404         930281.1296         699532.164         435.603866 SMA3           70405         930268.9224         699546.0742         436.366851 SMA3           70406         <					
70391         930299.1556         699529.1533         433.742352         tre 2"           70392         930300.2657         699536.6376         435.595278         tre 2"           70393         930309.4083         699547.3863         435.002802         tre 2"           70394         930316.5972         699547.8297         433.010525         tre 2"           70395         930348.483         699631.7057         441.49232         clf1           70396         930357.5931         699648.6663         437.352395         clf1 10           70397         930346.2645         699597.1932         434.066456         SMA3 ST           70398         930319.3927         699606.448         438.189504         SMA3           70400         930312.4766         699586.9398         438.702928         SMA3           70401         930301.2699         699555.7893         439.209586         SMA3           70402         930293.3051         699546.041         439.447629         SMA3           70403         930284.4795         699530.9135         435.74688         SMA3           70404         930281.1296         699532.164         435.603866         SMA3           70405         930268.9224         699546.0742 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
70392         930300.2657         699536.6376         435.595278         tre 2"           70393         930309.4083         699547.3863         435.002802         tre 2"           70394         930316.5972         699547.8297         433.010525         tre 2"           70395         930348.483         699631.7057         441.49232         clf1           70396         930357.5931         699648.6663         437.352395         clf1 10           70397         930346.2645         699597.1932         434.066456         SMA3           70398         930319.3927         699606.448         438.189504         SMA3           70399         930297.3949         699586.9398         438.702928         SMA3           70400         930312.4766         699567.2659         435.1414         SMA3           70401         930301.2699         699555.7893         439.209586         SMA3           70402         930293.3051         699546.041         439.447629         SMA3           70403         930284.4795         699532.164         435.603866         SMA3           70404         930281.1296         699532.164         436.366851         SMA3           70405         930268.9224         699546.0742	-				
70393         930309.4083         699547.3863         435.002802         tre 2"           70394         930316.5972         699547.8297         433.010525         tre 2"           70395         930348.483         699631.7057         441.49232         clf1           70396         930357.5931         699648.6663         437.352395         clf1 10           70397         930346.2645         699597.1932         434.066456         SMA3           70398         930319.3927         699606.448         438.189504         SMA3           70399         930297.3949         699586.9398         438.702928         SMA3           70400         930312.4766         699567.2659         435.1414         SMA3           70401         930301.2699         699555.7893         439.209586         SMA3           70402         930293.3051         699546.041         439.447629         SMA3           70403         930284.4795         699530.9135         435.74688         SMA3           70404         930281.1296         699532.164         435.603866         SMA3           70405         930268.9224         699546.0742         436.366851         SMA3           70406         930252.1323         699541.7775					
70394         930316.5972         699547.8297         433.010525 tre 2"           70395         930348.483         699631.7057         441.49232 clf1           70396         930357.5931         699648.6663         437.352395 clf1 10           70397         930346.2645         699597.1932         434.066456 SMA3 ST           70398         930319.3927         699606.448         438.189504 SMA3           70399         930297.3949         699586.9398         438.702928 SMA3           70400         930312.4766         699567.2659         435.1414 SMA3           70401         930301.2699         699555.7893         439.209586 SMA3           70402         930293.3051         699546.041         439.447629 SMA3           70403         930284.4795         699530.9135         435.74688 SMA3           70404         930281.1296         699532.164         435.603866 SMA3           70405         930268.9224         699546.0742         436.366851 SMA3           70406         930252.1323         699541.7775         436.646207 SMA3           70407         930245.4262         699550.4681         436.729416 SMA3           70408         930179.5126         699362.0768         432.892037 SMA4           70410         93014					
70395         930348.483         699631.7057         441.49232 clf1           70396         930357.5931         699648.6663         437.352395 clf1 10           70397         930346.2645         699597.1932         434.066456 SMA3 ST           70398         930319.3927         699606.448         438.189504 SMA3           70399         930297.3949         699586.9398         438.702928 SMA3           70400         930312.4766         699567.2659         435.1414 SMA3           70401         930301.2699         699555.7893         439.209586 SMA3           70402         930293.3051         699546.041         439.447629 SMA3           70403         930284.4795         699530.9135         435.74688 SMA3           70404         930281.1296         699532.164         435.603866 SMA3           70405         930268.9224         699546.0742         436.366851 SMA3           70406         930252.1323         699541.7775         436.646207 SMA3           70407         930245.4262         699550.4681         436.729416 SMA3           70408         930184.6761         699338.1479         431.003091 SMA4 st           70410         930145.5646         699390.2562         433.434544 SMA4           70412         9301					
70396         930357.5931         699648.6663         437.352395         clf1 10           70397         930346.2645         699597.1932         434.066456         SMA3 ST           70398         930319.3927         699606.448         438.189504         SMA3           70399         930297.3949         699586.9398         438.702928         SMA3           70400         930312.4766         699567.2659         435.1414         SMA3           70401         930301.2699         699555.7893         439.209586         SMA3           70402         930293.3051         699546.041         439.447629         SMA3           70403         930284.4795         699530.9135         435.74688         SMA3           70404         930281.1296         699532.164         435.603866         SMA3           70405         930268.9224         699546.0742         436.366851         SMA3           70406         930252.1323         699541.7775         436.646207         SMA3           70407         930245.4262         699550.4681         436.729416         SMA3           70408         930184.6761         699338.1479         431.003091         SMA4           70410         930145.5646         699390.2562					
70397         930346.2645         699597.1932         434.066456         SMA3 ST           70398         930319.3927         699606.448         438.189504         SMA3           70399         930297.3949         699586.9398         438.702928         SMA3           70400         930312.4766         699567.2659         435.1414         SMA3           70401         930301.2699         699555.7893         439.209586         SMA3           70402         930293.3051         699546.041         439.447629         SMA3           70403         930284.4795         699530.9135         435.74688         SMA3           70404         930281.1296         699532.164         435.603866         SMA3           70405         930268.9224         699546.0742         436.366851         SMA3           70406         930252.1323         699541.7775         436.646207         SMA3           70407         930245.4262         699550.4681         436.729416         SMA3           70408         930184.6761         699338.1479         431.003091         SMA4           70410         930145.5646         699390.2562         433.434544         SMA4           70411         930155.4208         699431.5978					
70398         930319.3927         699606.448         438.189504         SMA3           70399         930297.3949         699586.9398         438.702928         SMA3           70400         930312.4766         699567.2659         435.1414         SMA3           70401         930301.2699         699555.7893         439.209586         SMA3           70402         930293.3051         699546.041         439.447629         SMA3           70403         930284.4795         699530.9135         435.74688         SMA3           70404         930281.1296         699532.164         435.603866         SMA3           70405         930268.9224         699546.0742         436.366851         SMA3           70406         930252.1323         699541.7775         436.646207         SMA3           70407         930245.4262         699550.4681         436.729416         SMA3           70408         930184.6761         699338.1479         431.003091         SMA4           70410         930145.5646         699390.2562         433.434544         SMA4           70411         930155.4208         699431.5978         433.46583         SMA4           70412         930174.3552         699430.4633 <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
70399         930297.3949         699586.9398         438.702928         SMA3           70400         930312.4766         699567.2659         435.1414         SMA3           70401         930301.2699         699555.7893         439.209586         SMA3           70402         930293.3051         699546.041         439.447629         SMA3           70403         930284.4795         699530.9135         435.74688         SMA3           70404         930281.1296         699532.164         435.603866         SMA3           70405         930268.9224         699546.0742         436.366851         SMA3           70406         930252.1323         699541.7775         436.646207         SMA3           70407         930245.4262         699550.4681         436.729416         SMA3           70408         930184.6761         699338.1479         431.003091         SMA4 st           70409         930179.5126         699362.0768         432.892037         SMA4           70410         930145.5646         699390.2562         433.434544         SMA4           70412         930174.3552         699430.4633         434.55502         SMA4           70413         930178.3154         699429.2932					
70400         930312.4766         699567.2659         435.1414         SMA3           70401         930301.2699         699555.7893         439.209586         SMA3           70402         930293.3051         699546.041         439.447629         SMA3           70403         930284.4795         699530.9135         435.74688         SMA3           70404         930281.1296         699532.164         435.603866         SMA3           70405         930268.9224         699546.0742         436.366851         SMA3           70406         930252.1323         699541.7775         436.646207         SMA3           70407         930245.4262         699550.4681         436.729416         SMA3           70408         930184.6761         699338.1479         431.003091         SMA4 st           70409         930179.5126         699362.0768         432.892037         SMA4           70410         930145.5646         699390.2562         433.434544         SMA4           70411         930175.4208         699431.5978         433.46583         SMA4           70412         930174.3552         699430.4633         434.55502         SMA4           70413         930178.3154         699429.2932					
70401         930301.2699         699555.7893         439.209586         SMA3           70402         930293.3051         699546.041         439.447629         SMA3           70403         930284.4795         699530.9135         435.74688         SMA3           70404         930281.1296         699532.164         435.603866         SMA3           70405         930268.9224         699546.0742         436.366851         SMA3           70406         930252.1323         699541.7775         436.646207         SMA3           70407         930245.4262         699550.4681         436.729416         SMA3           70408         930184.6761         699338.1479         431.003091         SMA4 st           70409         930179.5126         699362.0768         432.892037         SMA4           70410         930145.5646         699390.2562         433.434544         SMA4           70411         930155.4208         699431.5978         433.46583         SMA4           70412         930174.3552         699430.4633         434.55502         SMA4           70413         930178.3154         699429.2932         434.673745         SMA4           70414         930186.9133         699438.2135					
70402         930293.3051         699546.041         439.447629         SMA3           70403         930284.4795         699530.9135         435.74688         SMA3           70404         930281.1296         699532.164         435.603866         SMA3           70405         930268.9224         699546.0742         436.366851         SMA3           70406         930252.1323         699541.7775         436.646207         SMA3           70407         930245.4262         699550.4681         436.729416         SMA3           70408         930184.6761         699338.1479         431.003091         SMA4 st           70409         930179.5126         699362.0768         432.892037         SMA4           70410         930145.5646         699390.2562         433.434544         SMA4           70411         930155.4208         699431.5978         433.46583         SMA4           70412         930174.3552         699430.4633         434.55502         SMA4           70413         930178.3154         699429.2932         434.673745         SMA4           70414         930186.9133         699438.2135         434.829046         SMA4	-				
70403         930284.4795         699530.9135         435.74688         SMA3           70404         930281.1296         699532.164         435.603866         SMA3           70405         930268.9224         699546.0742         436.366851         SMA3           70406         930252.1323         699541.7775         436.646207         SMA3           70407         930245.4262         699550.4681         436.729416         SMA3           70408         930184.6761         699338.1479         431.003091         SMA4 st           70409         930179.5126         699362.0768         432.892037         SMA4           70410         930145.5646         699390.2562         433.434544         SMA4           70411         930155.4208         699431.5978         433.46583         SMA4           70412         930174.3552         699430.4633         434.55502         SMA4           70413         930178.3154         699429.2932         434.673745         SMA4           70414         930186.9133         699438.2135         434.829046         SMA4					
70404         930281.1296         699532.164         435.603866         SMA3           70405         930268.9224         699546.0742         436.366851         SMA3           70406         930252.1323         699541.7775         436.646207         SMA3           70407         930245.4262         699550.4681         436.729416         SMA3           70408         930184.6761         699338.1479         431.003091         SMA4 st           70409         930179.5126         699362.0768         432.892037         SMA4           70410         930145.5646         699390.2562         433.434544         SMA4           70411         930155.4208         699431.5978         433.46583         SMA4           70412         930174.3552         699430.4633         434.55502         SMA4           70413         930178.3154         699429.2932         434.673745         SMA4           70414         930186.9133         699438.2135         434.829046         SMA4					
70405         930268.9224         699546.0742         436.366851         SMA3           70406         930252.1323         699541.7775         436.646207         SMA3           70407         930245.4262         699550.4681         436.729416         SMA3           70408         930184.6761         699338.1479         431.003091         SMA4 st           70409         930179.5126         699362.0768         432.892037         SMA4           70410         930145.5646         699390.2562         433.434544         SMA4           70411         930155.4208         699431.5978         433.46583         SMA4           70412         930174.3552         699430.4633         434.55502         SMA4           70413         930178.3154         699429.2932         434.673745         SMA4           70414         930186.9133         699438.2135         434.829046         SMA4					
70406         930252.1323         699541.7775         436.646207         SMA3           70407         930245.4262         699550.4681         436.729416         SMA3           70408         930184.6761         699338.1479         431.003091         SMA4 st           70409         930179.5126         699362.0768         432.892037         SMA4           70410         930145.5646         699390.2562         433.434544         SMA4           70411         930155.4208         699431.5978         433.46583         SMA4           70412         930174.3552         699430.4633         434.55502         SMA4           70413         930178.3154         699429.2932         434.673745         SMA4           70414         930186.9133         699438.2135         434.829046         SMA4					
70407         930245.4262         699550.4681         436.729416         SMA3           70408         930184.6761         699338.1479         431.003091         SMA4 st           70409         930179.5126         699362.0768         432.892037         SMA4           70410         930145.5646         699390.2562         433.434544         SMA4           70411         930155.4208         699431.5978         433.46583         SMA4           70412         930174.3552         699430.4633         434.55502         SMA4           70413         930178.3154         699429.2932         434.673745         SMA4           70414         930186.9133         699438.2135         434.829046         SMA4					
70408         930184.6761         699338.1479         431.003091         SMA4 st           70409         930179.5126         699362.0768         432.892037         SMA4           70410         930145.5646         699390.2562         433.434544         SMA4           70411         930155.4208         699431.5978         433.46583         SMA4           70412         930174.3552         699430.4633         434.55502         SMA4           70413         930178.3154         699429.2932         434.673745         SMA4           70414         930186.9133         699438.2135         434.829046         SMA4	II				
70409         930179.5126         699362.0768         432.892037         SMA4           70410         930145.5646         699390.2562         433.434544         SMA4           70411         930155.4208         699431.5978         433.46583         SMA4           70412         930174.3552         699430.4633         434.55502         SMA4           70413         930178.3154         699429.2932         434.673745         SMA4           70414         930186.9133         699438.2135         434.829046         SMA4	II				
70410     930145.5646     699390.2562     433.434544     SMA4       70411     930155.4208     699431.5978     433.46583     SMA4       70412     930174.3552     699430.4633     434.55502     SMA4       70413     930178.3154     699429.2932     434.673745     SMA4       70414     930186.9133     699438.2135     434.829046     SMA4					
70411     930155.4208     699431.5978     433.46583     SMA4       70412     930174.3552     699430.4633     434.55502     SMA4       70413     930178.3154     699429.2932     434.673745     SMA4       70414     930186.9133     699438.2135     434.829046     SMA4					
70412       930174.3552       699430.4633       434.55502       SMA4         70413       930178.3154       699429.2932       434.673745       SMA4         70414       930186.9133       699438.2135       434.829046       SMA4					
70413 930178.3154 699429.2932 434.673745 SMA4 70414 930186.9133 699438.2135 434.829046 SMA4					
70414 930186.9133 699438.2135 434.829046 SMA4	-				
70415  930197.0099  699462.8852  435.220976 SMA4	70415	930197.0099	699462.8852		

ID	Northing	Easting	Elevation	Decription
70416	930195.5101	699484.8354	435.702194	SMA4
70417	930223.3133	699466.8986	432.998221	
70418	930220.5536	699453.9476	432.275228	
70419	930217.8025	699444.8554	431.80266	
70420	930213.2998	699439.4543	432.136312	
70421	930215.3213	699429.737	431.434837	
70422	930212.9615	699416.727	432.319589	
70423	930215.4282	699456.7417	434.004376	
70424	930211.2525	699448.8447	434.021273	
70425	930207.4975	699438.6676	433.873827	
70426	930207.6631	699427.5202	433.442124	
70427	930199.5526	699407.6364	433.635667	
70428	930177.2409	699382.6684	433.446068	
70429	930182.2428	699414.8781	433.982213	
70430	930214.825	699478.7738	433.934351	
70431	930229.6613	699501.158	434.040366	
70432	930257.1103	699517.1977	434.079956	
70433	930235.3728	699529.9226	434.305411	
70434	930312.4856	699577.6933	435.12049	
70435	930324.3274	699564.1569	432.782839	
70436	930289.3281	699570.3432	440.013979	
70437	930279.5513	699561.571	440.921662	
70438	930271.6053	699555.4095	439.545224	
70439	930445.0936	699604.3479	429.29385	
70440	930435.8707	699604.9021	429.287073	
70441	930415.9459	699588.567	429.432032	
70442	930397.7617	699566.8285	429.326582	
70443	930377.2525	699546.0303	429.421274	
70444	930367.6667	699538.5067	429.294066	
70445	930349.5829	699529.0012	429.385365	
70446	930332.4839	699518.8158	429.496066	
70447	930303.2777	699504.3285	429.800321	
70448	930292.9831	699499.2017	429.973436	
70449	930286.9033	699501.213	429.313999	
70450	930269.2856	699488.6446	429.41399	
70451	930258.7642	699475.9012	429.363387	
70452	930249.5121	699449.1897	429.078973	
70453	930244.687	699418.3238	429.245559	
70454	930243.7013	699391.0902	429.162417	
70455	930230.276	699369.5978	429.367714	
70456	930214.1134	699344.3673	428.870831	
70457	930211.0192	699328.4285	428.968214	
70458	930205.7221	699318.3167	428.596705	
70459	930234.03	699368.3886	429.924448	
70460	930239.8588	699366.6974	431.008956	
70461	930247.4112	699379.9276	431.20521	
70462	930251.4348	699386.5559	431.212708	
70463	930255.5665	699386.2079	432.31195	
70464	930263.9607	699385.6162	432.387452	•
70465	930270.8033	699394.4879	429.906397	-
70466	930235.3991	699364.0106	430.670543	
70467	930243.4572	699380.1824	431.420283	

ID Northing	g East	ing El	evation	Decription
70468 930248.	7983 6993	89.6807 4	31.551997	elb6
70469 930254.			31.523762	
70470 930269.			31.719062	
70471 930277.			31.383613	
70472 930288.			31.218187	
70473 930296.			31.494013	
70474 930307.			31.628382	
70475 930309.			31.449531	
70476 930318.			31.702026	
70477 930321			30.994897	
70478 930323.			31.365121	
70479 930333.			35.618296	
70480 930330.			35.296451	
70481 930324.			34.168906	
70482 93031			432.99582	
70483 930307.			33.395165	
70484 930296.			33.544287	
70485 930283.			32.982779	
70486 930261.			33.352609	
70487 930251.			33.913269	
70488 93024			34.150006	
70489 930241.			30.982231	
70490 930256.			32.433772	
70491 930254.			34.000098	
70492 930251.			33.293097	
70493 930249.			32.188335	
70494 930261.			31.285745	
70495 930268.			33.758364	
70496 930271.			33.287974	
70497 930278.			32.319398	
70498 930290.			31.452011	
70499 930291			33.746357	
70500 930313.			33.401296	
70501 930323.			32.435786	
70502 930324.			34.195154	
70503 930331.			34.439656	
70504 930334.			35.249941	
70505 930328.			34.778682	
70506 930324.			32.654777	
70507 930325.			31.713677	
70508 930327.			33.285358	
70509 930327.			32.080369	
70510 930340.			31.279556	
70511 930351.			431.61972	
70512 930365.			431.84388	
70513 930377			31.768881	
70514 930382.			32.744564	
70515 930386.			35.252502	
70516 930393.			35.218525	
70517 930390.			32.435783	
70518 930398.	0897 6995	48.1786 4	32.426003	sma5

ID	Northing	Easting	Elevation	Decription
70520	930421.7426	699559.1444	434.877248	sma5
70521	930428.2024	699556.2462	435.067401	
70522	930432.5854	699572.36		
70523	930438.0135	699589.1877		
70524	930446.8557	699597.6849	431.730773	sma5
70525	930431.8106	699583.837		
70526	930443.4388	699598.2907	431.878987	
70527	930432.8317	699596.4526	431.760867	elb8
70528	930417.6989	699581.0079	432.040041	elb8
70529	930401.2267	699561.4597	432.039944	elb8
70530	930396.0714	699560.5325	430.642173	rpr5 st
70531	930396.1705	699555.458		
70532	930384.939	699546.5422	431.304785	rpr5 elb8
70533	930378.3901	699539.5383	431.322303	rpr5 elb8
70534	930370.3815	699536.8038	430.995109	rpr5 elb8
70535	930368.6941	699538.7956	429.618064	rpr5
70536	930365.5896	699548.413	429.052958	
70537	930363.0122	699556.0612	429.352403	rpr5
70538	930365.9734	699560.6477		
70539	930370.8893	699562.752	428.596768	rpr5
70540	930372.7023	699553.1942	428.786705	rpr5
70541	930376.5748	699544.6978	429.420504	rpr5
70542		699542.3368		rpr5
70543	930369.1368		430.088933	sel
70544	930369.2299	699537.0069	431.214366	shl2 st
70545	930353.2561	699528.4943	431.520932	
70546	930333.069	699517.2223		
70547	930314.4827	699507.8989		
70548	930302.1234			
70549	930291.925	699496.629	431.557666	
70550	930291.8238		430.532743	
70551	930279.9559	699491.1966		•
70552	930268.167	699480.8024		•
70553	930258.3836	699464.7503	430.331646	
70554	930276.777	699485.5922	431.249277	
70555	930265.3689		431.551889	
70556	930263.4048			
70557	930257.4302	699447.656		
70558	930253.2265	699423.6846		
70559	930254.7025	699414.4587	431.292726	
70560	930261.9114	699414.4346	431.207008	
70561	930279.3735	699424.832	431.270665	
70562	930296.9928	699432.8076	431.156568	
70563	930307.614	699440.3047	430.973972	
70564	930315.2808	699440.416	430.825563	
70565	930315.6805	699426.7901	431.049202	
70566	930321.0826	699423.3133	430.862748	
70567	930290.0075	699448.2584	431.625632	
70568	930266.219	699427.749	431.423964	
70569	930273.723	699443.0186	431.511772	
70570	930275.8071	699451.5476	430.919623	
70571	930277.5173	699456.5721	430.967981	sel

ID	Northing	Easting	Elevation	Decription
70572	930264.4323	699447.4713	431.682338	sel
70573	930270.7401	699463.5781	431.733585	
70574	930283.6806	699464.4664	431.641913	
70575	930296.2093	699460.0268		
70576	930305.675	699476.4402		
70577	930321.9818	699492.5545	431.609108	
70578	930340.1076	699500.2901	431.705271	
70579	930361.6062	699522.4187	431.27582	
70580	930383.3903	699536.4416	431.324447	
70581	930417.3581	699566.6362	433.000599	
70582	930424.4163	699579.8208	432.520441	
70583	930328.9437	699482.6968	430.623367	
70584	930333.712	699477.068	430.708363	
70585	930322.963			
70586	930326.6286	699462.0175	431.382633	
70587	930318.2354	699449.1808	431.412603	
70588	930309.0909	699449.1767	430.77996	
70589	930298.8793	699448.7736	431.403652	
70590	930256.5391	699459.4643	430.212138	
70590	930251.5327	699446.2465	430.203503	
70591	930248.1591	699424.4523	430.234971	
70592	930247.0959	699405.6066	430.200908	
70593	930259.169	699408.2766		
1	930292.4728	699423.0413	430.178587	
70595 70596			430.176567	
	930307.22 930312.1214	699434.9309		
70597 70598	930314.6353	699436.2051 699425.0804	430.228744 430.19346	
70598	930316.8499	699408.1862	430.195246	
-				
70600 70601	930312.396 930302.3792	699393.6848 699385.1357	430.180995 430.181579	
-		699387.4386		
70602	930286.043 930267.8765	699394.5524	430.164845	
70603			430.228941	
70604	930248.9843 930280.7556	699393.5516	430.231173 433.242252	
70605	930272.5303	699371.9443 699375.2049	433.475715	
70606 70607	930272.3804		433.715459	
l <del></del>		699359.1055		
70608	930268.9712 930269.0578			
70609 70610	930263.2602	699369.9552 699373.0967	433.718298 434.024256	
70610	930252.5231		434.244499	
70611	930286.2679	699380.5829 699356.5567	433.737306	
70613	930313.7727	699357.927	433.45575	
70614 70615	930187.2455	699545.7982	436.77081	
70616	930179.6849 930175.7374	699508.4767 699524.6519	435.768348 435.912952	
70617	930182.1299	699563.9979 699593.6227	438.108899 442.641709	
70618	930182.0657			
70619	930178.4755	699620.3826	446.721692	
70620	930163.2522	699625.8866	446.809834	
70621	930136.9071	699615.0882	446.552721	
70622	930106.8183	699588.4458		SMA4 sma2
70623	930208.4139	699565.6941	437.623247	upi

#### **Survey Information - Final Conditions**

ID	Northing	Easting	Elevation	Decription
70624	930211.6488	699565.8294	437.488881	SMA3
70625	930195.0617	699596.1596	442.685392	SMA3
70626	930204.3071	699608.9993	446.586031	SMA3
70627	930194.058	699638.1673	447.898863	SMA3
70628	930198.0215	699656.0074	446.092369	SMA3 sma1
70629	930184.6417	699647.3246	447.962685	bsw1 st
70630	930176.8948	699646.2944	447.990557	bsw1
70631	930179.3471	699627.8694	447.40556	bsw1
70632	930182.0536	699607.1922	444.847515	bsw1
70633	930184.3364	699590.8662	442.016637	bsw1
70634	930192.1785	699591.9776	441.788203	bsw1
70635	930189.8846	699608.1642	444.94972	bsw1
70636	930187.0844	699628.9032	447.379652	bsw1
70637	930194.0177	699571.4277	438.188291	sel
70638	930211.478	699531.9017	435.158395	sel
70639	930203.6595	699510.6957	435.075684	sel
70640	930187.1759	699450.7884	436.272877	htp3 cl

Key for descriptions can be found at the end of Appendix G

#### Appendix G

### SLC Environmental Solutions, Inc.

#### **Loeffel Site Environs**

#### **Area 28 Remedial Action Completion Report**

#### **Survey Information - Excavation**

Key (as provided by Wendel Duchscherer Surveyors):

bot bottom

bsw1 st brick sidewalk CDR1 ST concrete driveway

CHK1 check - control point check for our survey purposes

CL CREEK centerline of creek cl stream centerline of stream centerline of weire cl weire CLF1 chain link fence CSH 3" coniferous bush

DCH1 ditch

DCP1 top of curb (not edge of pavement) ELB1 elevation line break (breakline)

ELB3 RPR2 ST rpr = riprap EP1 edge of pavement EWT1 edge of water EX GND existing ground

FNC1 fence GW guywire HDG1 hedge

HTP13 CL horizontal traverse point (survey control)

inv e15"rcmp inv = invert

inv e24"rcmp rcmp = round corrugated metal pipe inv s30"hdpe n,e,s, or w = north, east, south, and west

n top bank top of bank (NORTH) nail survey nail (MAG, CST, etc.) ne cor weire northeast corner of weire

ne low pt low point rock rock RPR1 rpr = riprap

RWL1 retaining wall (TOP) RWLB1 bottom of retaining wall RWLB3 SDR3 ST sdr = stone drive sa69 samp = sample point

sa90 sa = description for excavation area with designation samp na71 na = description for excavation area with designation

SDR1 sdr = stone drive SEL spot elevation shl1 shoreline

sand or muddy area (used here to represent areas of

SMA1 no new topsoil) stm1 stream stump tree stump top of dam top of dam

tre 18in 18" diameter deciduous tree UPL utility pole with light

we1 st water elevation WTR water

 $\ensuremath{^{******}}$  "st" is a code used to run our topo routine, telling the program where to begin the line

\*\*\*\*\* the number following a description (i.e. CDR"1") represents a continuous feature located in the field