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COPY

August 11, 1998

Mr. Kevin Kelly
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
615 Erie Boulevard West
Syracuse, New York 13204

**Subject: Construction Certification Report
Site Preparation Activities
Shallow Bedrock Ground Water Interim Action
Former Powerex, Inc. Facility (Site No. 7-06-006)
Auburn, New York**

Dear Kevin:

Please find enclosed three copies of the Construction Certification Report prepared by Radian Engineering, Inc. (Radian) for the first phase of construction (i.e., the Site Preparation Activities) associated with the Shallow Bedrock Ground Water Interim Action at the above-referenced site. This work was performed under the supervision of the New York State Department of Environmental Conservation (DEC) pursuant to the Amended Order on Consent (Index No. A7-0352-97-03). The enclosed report documents the construction activities that were performed during the first phase and provides the DEC with record drawings of the completed works. As you are aware, the second phase of construction (i.e., the Ground Water Treatment System) is currently nearing completion, and the Construction Certification Report for this phase will be submitted at a later date.

As always, please contact me if you have any comments or questions.

Respectfully,

Paul Wm. Hare, C.P.G.
Remedial Project Manager

enclosures (three copies)

cc: Michael Lesser, Esq., DEC (Central Office)
David Foster, DEC (Central Office) (w/ two copies of enclosures)
Henriette Hamel, DOH (Syracuse Field Office) (w/ two copies of enclosures)
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Auburn 7-11-1998

***Construction Certification Report
Shallow Bedrock Groundwater
Interim Action
Site Preparation Activities***

***Former Powerex, Inc. Facility
Site No. 7-06-006
Auburn, New York***

Prepared for:

***General Electric Company
Corporate Environmental Programs
1 Computer Drive South
Albany, New York 12205***

Prepared by:

***Radian Engineering, Inc.
125 Tech Park Drive
Rochester, NY 14623***

July 17, 1998

Radian Engineering Inc.

**Construction Certification Report
Shallow Bedrock Groundwater
Interim Action
Site Preparation Activities**

**Former Powerex, Inc. Facility
Site No. 7-06-006
Auburn, New York**

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EXCECUTIVE SUMMARY

This document represents the Construction Certification Report for the Shallow Bedrock Groundwater Interim Action Site Preparation Activities at the former Powerex, Inc. (Powerex) facility in Auburn, New York. Site Preparation Activities included the following major elements of work:

- Removal of the Waste Solvent Tank at the northwest corner of the plant building and backfill of the tank excavation;
- Demolition of the interior of the Primary Treatment Room;
- Renovation of the interior of the Primary Treatment Room; and
- Water main service testing and installation to the Primary Treatment Room.

In addition to the above, the following major elements of work were added to the Site Preparation Activities via addenda:

- Removal of the Temporary Plating Solution Storage Tank on the east side of the plant building and backfill of the tank excavation; and
- Removal of cable raceway extending from the east side of the plant building to the main electrical substation.

Construction activities at the site commenced on July 28, 1997 and ended on February 4, 1998 with the completion of remaining punchlist items. Construction was performed by Clean Harbors Environmental Services, Inc. (CHES) under the supervision of Radian Engineering, Inc. (Radian) and was completed in general accordance with the project drawings and specifications dated May 9, 1997 and one design modification dated September 4, 1997. No major health or safety issues were encountered during the construction activities.

At the completion of construction, two items were not satisfactorily completed. These items are to be corrected during the next phase of construction for the Shallow Bedrock Groundwater Interim Action. The two items are:

- Reinstallation of the pipe stubs penetrating the exterior wall of the plant building in the pipe chase of the Separator Pit; and

- Resealing the wall surfaces in the pipe chase of the Separator Pit to eliminate remaining porosity.

1.0 BACKGROUND INFORMATION

1.1 Site Background

The site consists of 55.4 acres of land located on the boundary of the Town of Aurelius and the City of Auburn in Cayuga County, New York. The General Electric Company (GE) purchased the property, formerly farmland, in 1951 and constructed a manufacturing plant where a variety of electric components, including radar equipment, printed circuit boards for high-fidelity equipment, and high-voltage semi-conductors, were manufactured. The site was acquired by Powerex, Inc. (Powerex) in January 1986. Powerex continued to manufacture high-voltage semi-conductors until May 1990, when the plant was closed. In November 1990, GE purchased the site back from Powerex, largely to facilitate remedial activities. The plant remains inactive today.

Past waste solvent handling practices at the site included the disposal of waste solvents into one, possibly two, unlined evaporation pits: the North Evaporation Pit; and, the purported West Evaporation Pit. An unknown quantity of solvents was reportedly disposed of in the purported West Evaporation Pit located in the field just west of the plant building. Acetone may have been used to ignite fires in this pit to burn off ponded liquids. The practice of burning was apparently discontinued and the purported West Evaporation Pit abandoned in 1962 by bulldozing. However, although volatile organic compounds (VOCs) have been detected in overburden soils and groundwater in the field west of the plant building, the exact location, dimensions, and history of the purported West Evaporation Pit remain unknown. Aerial photographs clearly indicate that an evaporation pit was not present in this field in July 1954. Additionally, there is no visible expression of a former evaporation pit in aerial photographs taken in June 1963, and analysis of samples from a series of 49 test pits installed in November 1989 failed to indicate any signs of the purported West Evaporation Pit.

The North Evaporation Pit is located north of the northwestern corner of the plant building. Reports indicate that use of this pit began in 1962 or 1963, after the purported West Evaporation Pit was abandoned. During its use, the North Evaporation Pit received

an unknown quantity of waste solvents which were gravity-fed to the pit through pipes from the Drum Storage Building located on the north side of the plant building. Use of the North Evaporation Pit was reportedly discontinued when the underground Waste Solvent Tank was installed in 1966 or 1967.

The Waste Solvent Tank was a 21,000-gallon, underground concrete tank located just outside the northwestern corner of the plant building. Waste solvents were periodically removed from the tank and transported off-site for reclamation or disposal. Powerex discontinued use of the Waste Solvent Tank in August 1988 and closed the tank in December 1988 in accordance with a Closure Plan approved by the New York State Department of Environmental Conservation (NYSDEC).

Waste solvents were also stored in two small underground tanks located on the east side of the plant building. These Laboratory Waste Solvent Tanks, which were apparently installed in 1960, were reportedly used to collect waste solvents that were gravity fed via underground piping from the Engineering Laboratory located just inside the east wall of the plant building. Periodically, the contents of these tanks were reportedly pumped into 55-gallon drums, which were subsequently taken to the Drum Storage Building and emptied into the drain leading to the North Evaporation Pit. Use of the two tanks was reportedly discontinued in 1966 or 1967 when the Waste Solvent Tank and the drain lines that connected it to the Engineering Laboratory were installed. The two Laboratory Waste Solvent Tanks were removed in February 1994 as part of an Interim Remedial Measure (IRM) performed under the Order on Consent executed with the NYSDEC for the Remedial Investigation/Feasibility Study (RI/FS).

1.2 Previous Investigations

Systematic investigation of subsurface environmental conditions at the site began in December 1985 when a Phase I investigation was initiated to evaluate the vertical extent of contaminants in overburden soils at the North Evaporation Pit. This investigation was conducted by Dunn Geoscience Corporation and is documented in a report dated February 1986.

In November 1986, Dunn Geoscience Corporation proceeded with the Phase II investigation to obtain a general understanding of hydrogeologic conditions and to make a preliminary assessment of the nature and extent of chemical constituents, primarily VOCs, in groundwater in the vicinity of the North Evaporation Pit. The Phase II investigation is detailed in a report dated July 1987.

Based on the information obtained during the Phase I and II investigations, the site was formally added to the NYSDEC's Registry of Inactive Hazardous Waste Disposal Sites in October 1987. The site was designated Class 2, which requires that a remedial program be developed, including performance of a RI/FS.

Dunn Geoscience Corporation initiated the Phase III investigation in August 1987 to obtain a more thorough understanding of hydrogeologic conditions, further define the extent of VOCs in groundwater, and determine if VOCs were present in surface water at the site. The results of the Phase III investigation are presented in a May 1988 report and indicated that VOCs were present in the drainage ditch located in the northwest corner of the site and also in the storm sewer which passes through the field west of the plant building.

The fourth and final phase of voluntary investigation began in August 1988. Although the purpose of this Phase IV investigation was to better define the three-dimensional extent of VOCs within the bedrock groundwater, a considerable amount of information was also collected for both surface water and overburden soils. The Phase IV investigation is detailed in a September 1991 report prepared by Dunn Corporation.

1.3 Remedial Investigation/Feasibility Study

An Order on Consent was executed between GE and the NYSDEC on March 31, 1993. This order requires that GE perform a RI/FS for the site, and a RI/FS Work Plan was approved by NYSDEC and incorporated into the order. The RI/FS is currently in

progress. The Order on Consent also allows GE to propose IRMs for the NYSDEC's consideration.

GE retained Dunn Engineering Company to perform the RI. To date, all of the non-contingent tasks of the RI have been completed. These tasks included performing a step-rate pumping test on a large-diameter well, designated as PW-1, installed in the shallow bedrock hydrogeologic unit less than 50 feet downgradient of the North Evaporation Pit. In addition, some of the contingent tasks of the RI were triggered and have also been completed, including the permanent abandonment of selected wells, and the subsequent resampling of certain deep bedrock wells and their associated shallow bedrock wells.

Based on data developed from the site investigations performed to date, the site consists of three principal hydrostratigraphic units: overburden; shallow bedrock; and, deep bedrock. The overburden hydrostratigraphic unit consists of approximately 10 to 22 feet (15 feet average) of relatively fine-grained, glacially-derived, unconsolidated deposits. The water table fluctuates up to 10 feet seasonally, but during much of the year is near ground surface.

The shallow bedrock hydrostratigraphic unit consists of limestones of the Onondaga and underlying Manlius Formations, both of Devonian age. The combined thickness of these formations at the site is approximately 45 feet. The potentiometric surface in the shallow bedrock also fluctuates up to 10 feet seasonally, but is within a few feet of ground surface during the wet seasons (i.e., late fall through spring). The shallow bedrock is strongly anisotropic in vertical section, with a horizontal hydraulic conductivity approximately 250 to 500 times the vertical conductivity. The vertical hydraulic gradient is generally downward from the overburden to the shallow bedrock unit, and is also downward within the shallow bedrock to the deep bedrock unit.

The deep bedrock hydrostratigraphic unit consists of dolomites of the Rondout, Cobleskill, and Bertie Formations, all of which are of Silurian age. The deep bedrock unit is generally less fractured and less permeable than the limestones of the shallow

bedrock unit. Additional work is currently planned during the RI to develop a better understanding of groundwater conditions in the deep bedrock hydrostratigraphic unit.

As part of the RI, a Biodegradation Study was completed by Beak Consultants, Ltd. (Beak). In summary, Beak conducted a study on the biodegradation of trichloroethylene (TCE) and other VOCs in the groundwater in the three hydrostratigraphic units identified at the site. The objectives of the study were to determine if biodegradation is occurring and proceeding to convert VOCs to innocuous end products, to evaluate the nature of the biological processes, and to assess what role biodegradation could play in the overall remedial program. The information presented in the Biodegradation Study Report, dated April 1995, indicates that several biological processes are working symbiotically to degrade TCE in the overburden and shallow bedrock groundwater.

GE retained O'Brien & Gere Engineers, Inc. (O'Brien & Gere) to perform the FS, and the development of remedial alternatives has been initiated. O'Brien & Gere prepared RI/FS Work Plan Addendum No. 1 dated October 1994, which was implemented after obtaining NYSDEC approval. This included performance of constant-head pumping tests in the shallow bedrock hydrostratigraphic unit. As a subcontractor, Radian Engineering, Inc. (Radian) also performed pilot tests of the 2-PHASE Extraction™ process. The pilot tests consisted of a three-day test at pumping well PW-1, located next to the North Evaporation Pit, and one-day tests at pumping wells PW-2 and PW-3, located next to the Waste Solvent Tank and in the vicinity of the purported West Evaporation Pit, respectively. The data collected indicated that 2-PHASE Extraction™ is a viable technology to establish hydraulic control within the shallow bedrock hydrostratigraphic unit.

1.4 Interim Remedial Measures

To date, three IRMs have been completed at the site. Two are briefly described in this section. The third is described in Section 1.6.

Under the observation of Dunn Engineering Company, OBG Technical Services, Inc. excavated and removed the Laboratory Waste Solvent Tanks and their contents in February 1994. This IRM was performed under the Order on Consent pursuant to the NYSDEC-approved Laboratory Waste Solvent Tanks IRM Work Plan, dated September 1993. Soil from the base and walls of the excavations was sampled and VOCs were detected. In accordance with the work plan, the excavations were subsequently backfilled and the contingent investigative activities were performed to determine the extent of VOCs in the vicinity of the two tanks. These investigative activities included soil borings radiating outward from the two tanks and the installation of overburden and shallow bedrock monitoring wells. The resulting data have been incorporated into the RI, and these source areas are to be addressed in the FS for the site.

The second IRM involved the installation of additional fencing and gates at the site. This Access Restriction IRM was performed by Atlas Fence, Inc. and was completed in December 1994. Construction observation was conducted by O'Brien & Gere. This IRM was also performed under the Order on Consent, in accordance with the NYSDEC-approved Access Restriction IRM Work Plan, dated July 1994. Monthly inspections of the fencing and gates at the site are currently being performed.

1.5 Interim Action

To support development and implementation of an Interim Action addressing surface water and shallow bedrock groundwater at the site, Dunn Engineering Company prepared an Interim RI (IRI) Report to document the investigative activities which had been performed to date pursuant to the NYSDEC-approved RI/FS Work Plan. The investigative activities conducted pursuant to implementation of the Laboratory Waste Solvent Tanks IRM Work Plan were also described in the IRI Report, which was submitted to the NYSDEC in January 1995.

To expedite implementation of an Interim Action and to further support the associated decision-making, GE proposed to conduct certain pre-design investigation activities and also pilot test the use of dual-phase extraction at the site. These activities were

incorporated into the RI/FS via an addendum to the work plan. The pre-design investigation activities included: sampling of sediments in the drainage ditch at the site; a geotechnical assessment of three existing building foundations for possible reuse during the Shallow Bedrock Groundwater Interim Action; and, a constant-head pumping test of the large-diameter well previously installed next to the North Evaporation Pit designated as PW-1. The pilot testing consisted of three dual-phase extraction tests; one test was performed in well PW-1, and the two other tests were performed in new large-diameter wells installed next to the Waste Solvent Tank and purported West Evaporation Pit (designated as PW-2 and PW-3, respectively).

Upon completing the pre-design investigation and pilot testing activities, O'Brien & Gere performed a Focused Feasibility Study (FFS) to evaluate various interim remedial alternatives for surface water and the shallow bedrock groundwater. A FFS Report was submitted to the NYSDEC for review in February 1995. An addendum to the FFS Report was subsequently submitted to the NYSDEC in September 1995 that evaluated two additional interim remedial alternatives for the shallow bedrock groundwater, both of which involved hybrid discharge options.

As a result of the above studies, the NYSDEC, in consultation with the New York State Department of Health (NYSDOH), prepared a Proposed Interim Action Plan (PIAP). A public meeting was held in February 1996, and interested parties were invited to comment on the proposed plan during a 30-day public comment period. The NYSDEC subsequently prepared a Responsiveness Summary which addressed the comments that were received, and issued a Interim Action Record of Decision (IAROD) on March 29, 1996. The approved Interim Action included:

- Removal and disposal of sediments from the on-site drainage ditch, storm sewer sliplining, and installation of piping in the drainage ditch to minimize the infiltration of impacted overburden groundwater;
- Extraction and treatment of contaminated shallow bedrock groundwater in the primary source areas, and, possibly, in the secondary source areas;
- Possible enhancement of the natural biodegradation of contaminants already occurring in the shallow bedrock groundwater at the site; and

- A comprehensive groundwater and surface water sampling program to determine the effectiveness of the interim remedial actions.

Because the recommended interim remedial alternatives for surface water and shallow bedrock groundwater were not interrelated, GE separated these actions after submitting the FFS Report. A Basis of Design Report for the Surface Water Interim Action, prepared by Blasland, Bouck & Lee, Inc. (BBL), was submitted to the NYSDEC in September 1995. The Surface Water Interim Action was executed as a third IRM under the existing Order on Consent in accordance with the Surface Water IRM Work Plan, dated October 1995, and was substantially completed by the end of December 1995. The Surface Water Interim Action consisted of interim remedial alternative SW2 recommended in the FFS Report, and consisted of the following major activities:

- Removal and off-site disposal of impacted sediments in the on-site drainage ditch upstream of the Trap Dam;
- Slip-lining or grouting portions of the storm sewer piping to mitigate the infiltration of impacted overburden ground water;
- Installation of piping in the on-site drainage ditch to mitigate the infiltration of impacted overburden ground water;
- Removal and off-site disposal of the abandoned agricultural drainage pipe at the northwestern corner of the site; and
- A comprehensive monitoring program to document effectiveness.

As detailed in the FFS Report and its addendum, a number of interim remedial alternatives were developed and analyzed to address the shallow bedrock groundwater at the site. Alternative SBGW4D was the selected alternative. GE retained Radian to perform the design activities associated with the Shallow Bedrock Groundwater Interim Action. A Basis of Design Report, dated October 1996, was prepared to present the fundamental design concepts for the Shallow Bedrock Groundwater Interim Action. The 2-PHASE Extraction™ technology patented by Xerox Corporation was selected to perform the groundwater extraction component of the Interim Action. This technology was chosen because it is the most aggressive method currently available for accomplishing hydraulic control of groundwater at this site.

To expedite implementation of the Shallow Bedrock Groundwater Interim Action, the construction activities were conducted in two phases. The first phase is the subject of this document and generally regards the site preparation work that must be performed in advance of installing the on-site groundwater extraction and treatment system. The final design of the Site Preparation Activities for the Shallow Bedrock Groundwater Interim Action was presented in the Shallow Bedrock Groundwater Site Preparation Plan and the separately-bound Interim Action Site Preparation Contract Drawings and the Interim Action Site Preparation Materials and Performance Specifications, all dated May 9, 1997.

2.0 OVERVIEW OF CONSTRUCTION ACTIVITIES

Clean Harbors Environmental Services, Inc. (CHES) was selected by GE as General Contractor to implement the Site Preparation Activities associated with the Shallow Bedrock Groundwater Interim Action. A Remediation Contract was executed by and between GE and CHES on July 10, 1997. Radian was contracted by GE to provide construction oversight.

CHES performed the demolition and removal of the Waste Solvent Tank located at the northwest corner of the plant building, and also the Temporary Plating Solution Storage Tank located on the east side of the plant building. CHES subcontracted AAR to perform the asbestos removal from the floor of the Primary Treatment Room in the 1975 Building Addition. CHES excavated inside the 1975 Building Addition for installation of the Effluent Lift Station, the plumbing below the office area, and the pipe chase to the Separator Pit while providing on-site management of its subcontractors and waste handlers. JWJ Demolition (JWJ) was subcontracted to remove existing wall partitions, mezzanine, plumbing, and electric. VIP Structures (VIP) was subcontracted by CHES to perform the construction activities inside the 1975 Building Addition. VIP subcontracted the following for specialized on-site tasks: J.C. Smith to perform diamond-blade saw cuttings in the Primary Treatment Room floor; P. Vitale Construction for demolition of Loading Dock A; J&E Electric (J&E) for electrical installation and connections; Target Roofing for roof repairs; TAG Mechanical (TAG) for installation of wall fans, roof fans, water heater, gas furnace, and office heater; Raulli Iron Works (Raulli) for installation of steel grating, steel railings and stairways to the Separator Pit and the secondary containment; Onondaga Construction Systems (OCS) for application of Cafco heat shield on the Primary Treatment Room ceiling; and, Sutor Acoustics (Sutor) for the construction of the Primary Treatment Room walls. TAG subcontracted Mazelli Plumbing to install the office bathroom plumbing/ venting system and to stub piping into Separator Pit pipe chase link seals. Stonhard, Inc was subcontracted by CHES to install the resinous floor coating.

Central New York H&E Co., Inc. (CNY H&E) was subcontracted by Radian to perform water pipeline upgrade work and test the existing water service connection to the Primary Treatment Room from the City of Auburn water main.

Implementation of the Shallow Bedrock Groundwater Interim Action Site Preparation Activities began on July 28, 1997 and was substantially completed on December 29, 1997. Table 1 lists the dates of significant milestones achieved over the duration of the project. Weekly Construction Summary Reports are included in Appendix A. Analytical results from soil testing the Waste Solvent Tank and Temporary Plating Solution Storage Tank excavation backfill material are included in Appendix B. Compaction tests on the Waste Solvent Tank backfill lifts are included in Appendix C. Results from coliform testing of the new water service to the Primary Treatment Room are included in Appendix D.

Table 1. Significant Milestones Shallow Bedrock Groundwater Interim Action Site Preparation Activities Former Powerex, Inc. Facility, Auburn, New York	
Date	Significant Milestone
7/28/97	Site work commenced.
8/6/97	Demolition and removal of the Temporary Plating Solution Storage Tank was completed
8/7/97	Demolition and removal of the Waste Solvent Tank, pipe supports, and tank saddles was completed.
8/7/97	Backfill and compaction of the Temporary Plating Solution Storage Tank excavation was completed.
8/7/97	Backfill, compaction, and geotechnical testing of the Waste Solvent Tank excavation was completed.
8/12/97	Asbestos floor tiles were removed from the Primary Treatment Room floor.
8/18/97	Interior construction of the Primary Treatment Room began with diamond blade sawcuts for access ramps, the Effluent Lift Station, the office subsurface plumbing, and the Separator Pit outdoor pipe stubs.
8/22/97	Final concrete removal in the Waste Solvent Tank area is completed with the removal of remaining sections of the concrete tank retaining wall.
8/22/97	Temporary electrical power is supplied to the Primary Treatment Room via the existing electrical panel northwest of the former loading docks.
8/25/97	Interior demolition of the Primary Treatment Room was completed with the removal of Loading Dock A with the use of a track hoe ram attachment and hand jackhammer.

**Table 1. (Continued) Significant Milestones
Shallow Bedrock Groundwater Interim Action Site Preparation Activities
Former Powerex, Inc. Facility, Auburn, New York**

Date	Significant Milestone
8/26/97	Excavation of the Effluent Lift Station and the Separator Pit are completed. Excess soil from the excavations was staged to the former North Evaporation Pit area.
9/2/97	Concrete pours for the south mandoor steps, the containment curbing, and the Effluent Lift Station curbing were completed.
9/3/97	The removal of the cable raceway and associated support racks on the east side of the plant building was completed.
9/4/97	Final restoration of the Waste Solvent Tank area was completed with the removal of debris and addition of No. 2 crusher run to finish the final lift of the excavation backfill.
9/9/97	Final restoration of the Temporary Plating Solution Storage Tank area was completed.
9/9/97	Erection of metal wall studs in the Primary Treatment Room was completed.
9/10/97	Subsurface plumbing in the office bathroom area of the Primary Treatment Room was completed and pressure tested.
9/17/97	Link seals for the Separator Pit pipe chase were installed and the outside wall poured.
9/26/97	Installation of gypsum wallboard and fiberglass reinforced panels (FRP) panels were completed on the interior of the Primary Treatment Room.
10/2/97	Office bathroom plumbing was completed and pressure tested.
10/2/97	The secondary containment curb and the pump pad were completed.
10/3/97	Permanent power to the main panel in the Primary Treatment Room from the adjacent utility pole was completed.
10/10/97	Application of Cafco heat shield on the ceiling of the Primary Treatment Room was completed.
10/13/97	Overhead doors for the loading dock bay and the storage room entrance were installed.
10/15/97	The office structure was completed with the application of sheet rock to the interior of the office.
10/16/97	The stairway to the north entrance of the Primary Treatment Room was completed.
10/16/97	Known roof leaks were repaired.
10/17/97	Wall mounted supply fans were installed.
10/18/97	The natural gas fired furnace and associated flue vents were installed.
10/22/97	Painting of the office interior and block walls of the Primary Treatment Room is completed.
10/28/97	Concrete work in the Primary Treatment Room is completed with the pouring of the link seals in the secondary containment wall.
11/4/97	Installation of all door hardware for the Primary Treatment Room was completed.

**Table 1. (Continued) Significant Milestones
Shallow Bedrock Groundwater Interim Action Site Preparation Activities
Former Powerex, Inc. Facility, Auburn, New York**

Date	Significant Milestone
11/6/97	Pipe stubs were installed in the link seals of the Separator Pit pipe chase.
11/7/97	The excavation for the Separator Pit pipe stub extensions was staked and backfilled.
11/7/97	Resinous floor coating installation was completed.
11/10/97	Galvanized steel railings and stairs were installed in the Separator Pit and on top of the office mezzanine deck.
11/14/97	Roof leaks that were discovered after initial roof repairs were located and sealed.
11/21/97	Ladders for the secondary containment wall and the office mezzanine were installed.
11/21/97	CHES and VIP remove equipment from site, ending full-time presence on-site.
12/9/97	Water service installation work was initiated with the mobilization of CNY H&E.
12/10/97	The grinder pump for the sewage lift basin was installed.
12/11/97	Electrical work inside and outside the Primary Treatment Room was completed. This included contractor installation, wire termination, and panel installation.
12/15/97	An 8 inch bypass was completed around the meter house for the water service. A redundant valve was placed downstream of the 12 inch by 8 inch reducer. Both previous water mains exiting the meter house were cut and capped. The eastern pipe exiting the meter house was connected for water service downstream of the bypass.
12/18/97	The three water supply lines entering the plant building at the northwest corner were configured as specified. The two southern lines were cut and capped. The northern line was left for use as the water supply for the Primary Treatment Room. The northern fire hydrant was removed and replaced with a new hydrant. The remaining portion of the water line that extended northward from the north hydrant was cut and capped.
12/23/97	A new culvert pipe was installed on the access to the north hydrant, replacing a transite pipe removed during prior excavation.
12/29/97	Pressure testing of the water service to the Primary Treatment Room is completed.
1/5/98	Water from the Primary Treatment Room service line was sampled for coliform bacteria count and submitted for analysis.
2/4/98	All site work completed with the modifications to the interior ladders and handrails.

2.1 Removal of Tanks

Demolition activities for the Waste Solvent Tank and the Temporary Plating Solution Storage Tank removal began on July 29, 1997. Major activities consisted of the following:

- Removal of approximately 20,000 gallons of water from the Waste Solvent Tank;
- Demolition, removal, and off-site disposal of the Waste Solvent Tank vaults and associated concrete retaining walls, tank saddles, and pipe rack supports;
- Backfill and compaction of the Waste Solvent Tank excavation;
- Removal of approximately 14,000 gallons of water from the Temporary Plating Solution Storage Tank located on the east side of the plant building;
- Water removed from both the Waste Solvent Tank and the Temporary Plating Solution Storage Tank was temporarily stored in two 20,000-gallon frac tanks, one located to the north of the Waste Solvent Tank and the other located north of the Temporary Plating Solution Storage Tank area;
- Removal, torch cutting, and off-site disposal of the Temporary Plating Solution Storage Tank and associated pumps and piping; and
- Backfill, compaction, and reseeding of the Temporary Plating Solution Storage Tank excavation area.

The tank demolition portion of the Shallow Bedrock Groundwater Interim Action Site Preparation Activities was completed on August 22, 1997. Approximately 200 cubic yards of bank run were brought on-site as backfill material for the excavations left by the Waste Solvent Tank and the Temporary Plating Solution Storage Tank. Approximately 60 cubic yards of topsoil were brought on-site to cover areas disturbed by excavation and vehicle traffic in the Temporary Plating Solution Storage Tank area and the staging area north of the Waste Solvent Tank area. Approximately 40 cubic yards of No. 2 crusher run were brought on-site as the final lift of the Waste Solvent Tank excavation backfill. Demolition of the Waste Solvent Tank and the Temporary Plating Solution Storage Tank resulted in approximately 250 cubic yards of concrete/metal scrap that were transported off-site to Chemical Waste Management, Inc.'s (CWM's) permitted RCRA Subtitle C facility in Model City, New York.

2.2 Primary Treatment Room Interior Demolition

Demolition of the 1975 Building Addition interior for use as the Primary Treatment Room began on July 28, 1997. The following activities were performed to complete this task:

- Asbestos tile removal from the Primary Treatment Room floor;
- Removal of existing mezzanine structure in Primary Treatment Room back to the sixth bay;
- Demolition, removal, and off-site disposal of all non-structural interior walls, conduit, wiring, lighting fixtures, sprinkler piping, and other miscellaneous debris from the Primary Treatment Room interior as specified in the project drawings and specifications;
- Removal of existing hydraulic lifts from Loading Docks A and B;
- Containerize and off-site disposal for non-hazardous hydraulic oil from the loading dock lifts (chemical analysis of oil is provided in Appendix E); and
- Demolition and removal of the cable raceways on the east side of the plant building.

JWJ was subcontracted by CHES to perform the interior demolition of the Primary Treatment Room and to provide off-site disposal of removed materials. Demolition activities performed by JWJ resulted in one 20 cubic yard rolloff dumpster of scrap metal, one tractor trailer load of salvageable wooden wall studs, drywall, plywood, mezzanine support beams, and sprinkler pipe, and two 20 cubic yard rolloff dumpsters of unsalvageable demolition scrap from the Primary Treatment Room interior. JWJ disposed of all material produced during the demolition off-site.

Demolition and removal of the lifts in Loading Docks A and B, performed by CHES and P. Vitale Construction, resulted in the recovery of 40 gallons of hydraulic oil from the lift pistons. The hydraulic oil was removed from the site and disposed of by CHES. Interior demolition and removal of the cable raceway by JWJ was completed on September 5, 1997. AAR began and completed asbestos removal activities on August 12, 1997. One rolloff dumpster of asbestos tiles and particle containment material was produced as a result of asbestos removal activities. AAR removed the asbestos dumpster from the site and properly disposed of the contents.

2.3 Primary Treatment Room Renovation

The Primary Treatment Room renovation work began on August 15, 1997 with the mobilization of VIP. The following activities were performed to complete this task:

- Construction of the Separator Pit with pipe chase in the former Loading Dock A area;
- Filling Loading Dock B with crushed stone and capping with concrete;
- Installation of motor driven sectional door for the new loading dock at former Loading Dock B area;
- Installation of manual rollup door at the storage room entrance;
- Installation of man doors at the storage room, southeast corner and office entrances to the Primary Treatment Room;
- Installation of an emergency exit mandoor in the Separator Pit;
- Construction of 6-foot block wall on the east and south sides of the Primary Treatment Room;
- Construction of new metal stud walls, insulated with fiberglass insulation, and fronted by gypsum wall board and FRP panels;
- Application of Cafco heat shield to the ceiling of the Primary Treatment Room;
- Construction of the Effluent Lift Station wet well;
- Application of Stonhard resinous coating to the floor and walls of the Primary Treatment Room;
- Construction of secondary containment walls to house water storage tanks in the south end of the Primary Treatment Room;
- Construction of an office area with a mezzanine area above the office;
- Installation of a bathroom sink, shower, and toilet with associated plumbing and vent systems;
- Installation of a sewage grinder basin with level-controlled grinder pump for sewage discharge;
- Installation of a natural-gas-fired water heater in the office with associated piping and vent systems;
- Installation of a wall-mounted electric heater for the office;
- Construction of concrete ramps for the new loading dock and storage room entrances;
- Construction of concrete pads for the electrical panels and the furnace unit;
- Installation of steel railings for the Separator Pit, office mezzanine, and the secondary containment accesses;
- Installation of three roof-mounted exhaust fans;
- Installation of three wall-mounted supply fans;
- Construction of a concrete stairway to the outdoor office mandoor;
- Installation of a natural-gas-fired furnace to provide heat to the Primary Treatment Room;
- Repairs of roof leaks above the Primary Treatment Room;
- Installation of conduit, wiring, receptacles, disconnects, and circuit breakers associated with the electric powered items in the Primary Treatment Room;

- Electrical connections from overhead lighting, overhead door opener, outdoor flood lights, office lighting, roof exhaust fans, wall supply fans, emergency exit lights, and outlets to the main control panel power supply;
- Testing of mechanical component functionality;
- Testing electrical connection functionality;
- Installation of an emergency eye wash/shower station; and
- Stub piping into pipe chase area of the Separator Pit.

Construction activities performed by VIP, which included the Separator Pit construction, concrete sawcutting, and the Effluent Lift Station construction, produced approximately 50 cubic yards of concrete and metal scrap that was transported off-site by CWM. The concrete sawcutting of the Primary Treatment Room floor resulted in approximately 100 gallons of blade lubrication water. Blade lubrication water was added to the frac tank containing water from the former Waste Solvent Tank. Excess soil removed from the Separator Pit and the Effluent Lift Station was transported to the staging area at the North Evaporation Pit. Six (6) cubic yards of No. 2 crushed stone were used to fill Loading Dock B and voids between the surrounding soil and the walls of both the Separator Pit and the Effluent Lift Station. Changes and/or accepted deviations from the project drawings and specifications pertaining to the Primary Treatment Room refurbishing are presented in Section 3.

2.4 Water Main Service Installation

CNY H&E was subcontracted by Radian to perform water main work as described in the Shallow Bedrock Groundwater Interim Action Site Preparation Plan. The following activities were performed to refurbish the existing water main on the site so that City of Auburn water service could be provided to the Primary Treatment Room:

- Locating and cutting of the 12-inch City of Auburn service main prior to entry into the meter house at the southeast corner of the site;
- Reducing the 12-inch service main down to a 8-inch main;
- Adding a redundant shutoff valve to the 8-inch line to assist in pressure testing;
- Rerouting the new 8-inch main around the meter house in the southeast corner of the of the site;
- Abandoning by cutting and capping the 8-inch main along the east side of the plant building;
- Cutting and capping three building feed lines on the south side of the plant building;

- Removal of the southernmost fire hydrant and cabinet on the west side of the plant building;
- Removal and replacement of the northernmost fire hydrant and shutoff valve on the west side of the plant building;
- Cutting and capping two of the three building feed lines on the west side of the plant building, leaving one of the feed lines intact for use as the water supply line for the Primary Treatment Room;
- Abandoning the continuation of the western 8-inch main past the northern hydrant;
- Backfilling all excavations to original grade;
- Chlorinating water in the main and testing for total coliform bacteria; and
- Pressure testing the completed line to greater than 90 pounds per square inch gauge (psig).

CNY H&E began water main work on December 9, 1997 and completed the activities on December 29, 1997. Scrap produced from this portion of the Site Preparation Activities, including ductile iron pipe, two fire hydrants, two fire hydrant housings, and various pipe fittings, was removed from the site and disposed of by CNY H&E. A transite (asbestos composite) pipe was excavated while replacing the north hydrant on the west side of the plant building. The pipe was removed from the excavation, wrapped in plastic, and staged on-site while awaiting disposal.

Representatives of GE, Radian, CHES, VIP, TAG, and Mazelli Plumbing participated in a site walkover on January 4, 1998 to discuss remaining punchlist items. With two exceptions, these items were completed by February 4, 1998. Two items from the punchlist remained incomplete. Repair and replacement of high density polyethylene (HDPE) pipe stubs in the link seals of the Separator Pit pipe chase will be deferred to the second phase of the construction. The Stonhard coating in the Separator Pit will be re-applied to eliminate porosity observed in the original coating.

3.0 SUMMARY OF CHANGES

Prior to the award for construction, three addenda were issued to the Request for Bids. These addenda became part of the contract documents. GE executed a Remediation Contract with CHES on July 9, 1997. A building permit was issued by the Town of Aurelius on July 28, 1997, and construction activities commenced on this date.

3.1 Work Clarifications

Table 2 summarizes Work Clarifications submitted by Radian to CHES during the Site Preparation Activities construction. Copies of Work Clarifications are found in Appendix F.

Table 2: Work Clarifications Shallow Bedrock Groundwater Interim Action Site Preparation Activities Former Powerex, Inc. Facility, Auburn, New York		
Number	Date	Description
1	8/21/97	Provided details of actual Primary Treatment Room dimensions, and the actual location of the Effluent Lift Station.
2	8/21/97	Provided details regarding the removal of the eastern loading dock (Loading Dock B).

3.2 Design Modifications

One design modification was issued on September 4, 1997 addressing seven areas. These were:

- Modifications to the Effluent Lift Station;
- Addition of an exit door to the Separator Pit;
- Addition of concrete pads to the Primary Treatment Room floor;
- Addition of wall penetrations to the secondary containment wall in the Primary Treatment Room;
- Clarification of the location of the water service entrance to the treatment room;
- Clarification of the repairs required on the western block wall of the Primary Treatment Room; and
- Clarification of the location of the wall mounted supply fans.

4.0 ENGINEER'S CONSTRUCTION CERTIFICATION STATEMENT

Owner: General Electric Company
Project: Shallow Bedrock Groundwater
Interim Action Site
Preparation Plan

Engineer: Radian Engineering, Inc.
Engineer's Project #: 630137
Contractor: Clean Harbor, Inc.
Contract Date: May 9, 1997

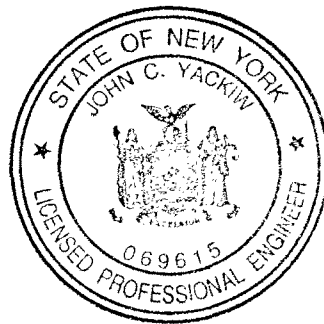
I hereby certify, as a Professional Engineer registered in the State of New York, that, based on our continuous observations of the subject contract, the work of this contract has been completed in general conformance with the detailed design for the Shallow Bedrock Groundwater Interim Action Site Preparation Activities, dated May 9, 1997, which was comprised of the following design documents:

- Shallow Bedrock Groundwater Interim Action Site Preparation Plan (Radian, May 9, 1997).
- Shallow Bedrock Groundwater Interim Action Site Preparation Materials and Performance Specifications (Radian, May 9, 1997).
- Shallow Bedrock Groundwater Interim Action Site Preparation Contract Drawings (Radian, May 9, 1997).

Below are listed exceptions to completion that cannot be completed due to site conditions:

- Resealing the wall surfaces in the pipe chase of the Separator Pit. This exception will be completed in the next phase of construction.

By: John C. Yackiw, P.E.
John C. Yackiw, P.E.
Senior Engineer
Radian Engineering, Inc.



Date: July 17, 1998

APPENDIX A
WEEKLY CONSTRUCTION SUMMARY REPORTS

WEEKLY CONSTRUCTION REPORT

DATES: 7/28-8/1/97
CONTRACTOR: Clean Harbors Inc.
PROJECT: GE Powerex Construction
LOCATION: Auburn, New York
PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE

JWJ Demolition

SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS

Clean Harbors Inc. mobilized field personnel and equipment for the dewatering and demolition of the Waste Solvent Tank and the Plating Tank. This equipment included a trackhoe, two 20,000 gallon frac tanks, a backhoe, Personal Protective Equipment (PPE), and a diaphragm pump. Clean Harbors located the Plating Tank and determined that it was a metal tank. Two pumps and motors were removed from the Plating tank in preparation for dewatering and removal. Dewatering of the Waste Solvent Tank and the Plating Tank was accomplished by using a vacuum pump and/ or a diaphragm pump. Approximately 14,000 gallons of water were removed from the Plating tank while approximately 20,000 gallons of water were removed from the Waste Solvent Tank. Clean Harbors removed the Waste Solvent Tank retaining wall and the concrete tank supports between the Tank and the storage building. While removing the retaining wall, Clean Harbors began removing trees and brush from the Waste Solvent Tank area. After dewatering of the Waste Solvent Tank was complete, demolition of the Tank sidewalls commenced.

JWJ Demolition mobilized field personnel, hand tools, a hydraulic lift, and waste dumpsters in preparation for demolition of the Primary Treatment Building interior. During the week, JWJ removed drywall, plywood, moldings, wooden wall studs, air circulation duct work, sprinkler system piping, and metal caging on the mezzanine floor. Light fixture ballast that may have contained PCBs were segregated from the non-PCB ballasts.

- DISTRIBUTION:
- 1. Field Office
 - 2. Home Office
 - 3. Project Manager
 - 4. GE, Paul Hare

OBSERVER Scott Daskiewich

WEEKLY CONSTRUCTION REPORT

DATES: 8/4-8/8/97

CONTRACTOR: Clean Harbors Inc.

PROJECT: GE Powerex Construction

LOCATION: Auburn, New York

PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE

JWJ Demolition

SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS

During this week, Clean Harbors completed demolition and removal of the Waste Solvent Tank and the Plating Tank. The Plating Tank was found to be constructed of thick gauge steel with a rubber liner inside. After the Plating Tank was removed, it was cut into pieces for loading into roll-off dumpsters using an ox/acetylene torch. The rubber tank liner was stripped out of the tank using a backhoe. Solids and other waste found in the bottom of the tank was containerized in a 55-gal. drum. The excavation for the Plating tank was backfilled and compacted in one foot lifts with soil and fill. A one foot layer of topsoil was placed on the Plating Tank excavation area. Concrete and rebar debris from the Waste Solvent Tank were placed into roll-off dumpsters for off-site disposal. After the Waste Solvent Tank was removed, Clean Harbors removed the remaining dike wall between the tank and the driveway. The excavation of the former Waste Solvent Tank was backfilled and compacted in one foot lifts with imported fill material and NYSDOT approved No. 2 crusher run on the last lift.

JWJ Demolition removed the mezzanine structure to the 6th column line as specified in Addendum 2, Item 4. JWJ also continued to remove materials from the Primary Treatment Building interior. During removal of a sprinkler pipe in the Primary Treatment Building, a copper line running from a ceiling mounted A/C unit to roof mounted A/C unit was ruptured. The leak was sealed by Clean Harbors but was not expected to be contained. A HVAC contractor was contacted to be on-site Monday 8/11 to remove any remaining freon and to discharge another small roof mounted A/C unit.

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Scott Daskiewich

WEEKLY CONSTRUCTION REPORT

DATES: 8/11-8/15/97
CONTRACTOR: Clean Harbors Inc.
PROJECT: GE Powerex Construction
LOCATION: Auburn, New York
PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE
JWJ Demolition
AAR
VIP Structures
SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS
<p>A TAG HVAC technician arrived on-site to recover freon from the A/C units on the ceiling and roof. No freon was recovered from the ceiling unit and 2.5 lb. of freon was recovered from the roof mounted unit. The ceiling unit was thought to contain between 5 and 10 lb. of freon.</p>
<p>AAR completed the removal of asbestos floor tiles under the former mezzanine. A representative from the NYS Department of Labor was onsite to check the licenses of the asbestos abatement team. AAR had the correct documentation and was allowed to complete the job.</p>
<p>Clean Harbors and JWJ removed the loading dock rams and loaded the metal waste on dumpsters. Clean Harbors removed the oil from the ram piston.</p>
<p>VIP Structures removes entrance doors from the storage room to the Primary Treatment Building. VIP also cuts the rolling door opening from the storage room to the Treatment Building. Locations of saw cuts on concrete floor were marked.</p>

DISTRIBUTION: 1. Field Office
 2. Home Office
 3. Project Manager
 4. GE, Paul Hare

OBSERVER Scott Daskiewich

WEEKLY CONSTRUCTION REPORT

DATES: 8/18-8/23/97
CONTRACTOR: Clean Harbors Inc.
PROJECT: GE Powerex Construction
LOCATION: Auburn, New York
PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE
VIP Structures
Onondaga Construction Systems
J&E Electric
J. C. Smith
SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS
<p>J.C. Smith completes the saw cuts in the Primary Treatment Room floor for the access ramps, effluent lift station, office bathroom, outer pipe chase under the driveway, and the separator pit. The cut slabs were cut into sections and removed with a forklift by VIP. 150 gallons of cutting water from the saw were transferred to a 20,000 gallon frac tank.</p> <p>VIP Structures completed the following activities during the week: removal of the fire door on the west wall and repair of the block wall, removal of flashing around the loading dock bays, removal of existing door jambs from the loading dock bays, removal of the window in the NW corner of the building and repair of the block wall, began building the east and south block wall, constructed angle iron frames for the lift station and separator pit, and staged removed concrete slabs on the Waste Solvent Tank area.</p> <p>Onondaga Construction Systems steam cleaned the Primary Treatment Building ceiling in preparation of spray on heat shield.</p> <p>Clean Harbors and VIP demolish loading dock A with hand air hammers and trackhoe rams. 20+ inches of concrete are encountered in the loading dock floor. Clean Harbors removes remaining concrete pipe runway in the Plating Tank area and cuts off PVC pipes flush with overhead metal pipes. The remaining concrete in the dike wall adjacent to the former Waste Solvent Tank was removed by Clean Harbors.</p> <p>Pipes of unknown origin are discovered in the bottom of the effluent lift station pit but are determined not to interfere with the concrete base or sidewalls.</p> <p>J&E Electric completes temporary power service to the Primary Treatment Building from the BBL electric panel.</p>

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Scott Daskiewich

WEEKLY CONSTRUCTION REPORT

DATES: 8/25-8/29/97
CONTRACTOR: Clean Harbors Inc.
PROJECT: GE Powerex Construction
LOCATION: Auburn, New York
PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE
JWJ Demolition
VIP Structures
SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS
<p>Clean Harbors excavated the effluent lift station and the separator pit. While excavating the separator pit, a 6" clay drain pipe was broken in the bottom of the excavation. The pipe ran diagonally from the west side of the pit to the northeast corner. The pipe was approximately 7 feet below the existing concrete floor. The pipe will be replaced and rerouted.</p> <p>JWJ Demolition partially removes the wire raceway on the east side of the building and completed some finishing tasks inside the primary treatment building.</p> <p>VIP Structures completed removal of concrete from the bottom of the separator pit. Also completed was the concrete pouring of the effluent lift station base and side walls. After the concrete had set, Clean Harbors backfilled around the walls with NYSDOT No.2 Crushed stone. VIP poured concrete for the Loading Dock B retaining wall.</p>

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Scott Daskiewich

WEEKLY CONSTRUCTION REPORT

DATES: 9/1-9/5/97

CONTRACTOR: Clean Harbors Inc.

PROJECT: GE Powerex Construction

LOCATION: Auburn, New York

PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE

VIP Structures

Sutor Acoustics

JWJ Demolition

SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS

Clean Harbors transferred excess soil from the effluent lift station and separator pit to the North Evaporation Pit staging area. Clean Harbors repair the broken clay drainage pipe in the separator pit excavation with two offset Fernco fittings and a section of 4" PVC pipe. Clean Harbors excavated the pipe chase leading to the separator pit, completed covering the Waste Solvent Tank area with No. 2 crusher run and removed the remaining trees and garbage from that area. At the Plating tank area, Clean Harbors leveled the area and spread topsoil.

VIP Structures poured concrete for the remaining grade at the effluent lift station, the main electrical panel pad, the south man door step, the separator pit floor, the access/egress ramps from the storage room to the treatment building, and the western portion of the containment area curb.

VIP also began block work on the side walls of the separator pit and putting up door jambs for the rollup door from the storage room to the treatment building.

Sutor Acoustics began putting up metal wall studs and gypsum drywall on the east, south and west walls of the building interior.

JWJ Demolition completed the dismantling of the wire raceway on the east side of the building. A concrete footer for a tower support of the raceway was removed by Clean Harbors.

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Scott Daskiewich

WEEKLY CONSTRUCTION REPORT

DATES: 9/8-9/12/97
CONTRACTOR: Clean Harbors Inc.
PROJECT: GE Powerex Construction
LOCATION: Auburn, New York
PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE

VIP Structures

Sutor Acoustics

Mazelli Plumbing

SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS

Sutor Acoustics completed erection of wall studs and drywall on the east, south and west walls. Sutor then began installation of the FRP panels and cutting 38" by 38" frames for the wall exhaust fans on the west wall. Sutor adjusted for the north wall being out of plumb 2.25" by putting a step in the upper portion of the wall.

Mazelli Plumbing installed underground plumbing and the grinder basin in the office bathroom area.

VIP Structures poured concrete into the bathroom floor excavation and blocked the north wall between the storage room access doors. VIP plugged two clean-outs for an undetermined drain line underneath the Primary Treatment Room floor with concrete.

Clean Harbors continued to level the area by spreading topsoil and hand raking the Plating tank area.

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Scott Daskiewich

WEEKLY CONSTRUCTION REPORT

DATES: 9/15-9/19/97

CONTRACTOR: Clean Harbors Inc.

PROJECT: GE Powerex Construction

LOCATION: Auburn, New York

PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE

VIP Structures

J&E Electrical

SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS

VIP Structures framed the exhaust fan holes on the west wall with wood beams and installed the door jamb for the loading dock door. Link seals for the separator pit arrive onsite, the seals are placed, and concrete is poured around them to form the outside wall of the pipe chase in the separator pit. After that concrete set, the separator pit floor was poured and trowel finished. After the pit floor was poured, Clean Harbors backfilled the surrounding excavation with NYSDOT No. 2 crushed stone. VIP masons then began to lay the block walls of the separator pit up to Primary Treatment Room floor level.

J&E Electrical set the main electrical panel on the pad and began running conduit for main power from the corner of the building to the panel.

Clean Harbors removed the water from a rented frac tank and transferred it to their own frac tank so the rented one could be removed from the site.

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Scott Daskiewich

WEEKLY CONSTRUCTION REPORT

DATES: 9/22-9/26/97
 CONTRACTOR: Clean Harbors Inc.
 PROJECT: GE Powerex Construction
 LOCATION: Auburn, New York
 PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE
VIP Structures
Sutor Acoustics
SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS
<p>VIP Structures laid block for the north wall of the separator pit and set the 2 ft. emergency exit door jamb. The office floor was formed and poured. The loading dock ramp was formed and poured and service entrance wire was pulled through to the main panel box.</p> <p>Sutor Acoustics completed installation of FRP panels on the north wall and began framing the office with metal studs.</p>

- DISTRIBUTION:
1. Field Office
 2. Home Office
 3. Project Manager
 4. GE, Paul Hare

OBSERVER Steven May

WEEKLY CONSTRUCTION REPORT

DATES: 9/29-10/3/97
CONTRACTOR: Clean Harbors Inc.
PROJECT: GE Powerex Construction
LOCATION: Auburn, New York
PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE

VIP Structures

Sutor Acoustics

Mazelli Plumbing

J&E Electric

SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS

VIP Structures forms and pours secondary containment curb and equipment pads. In the office, VIP locates and cuts the A/C unit opening in the wall. Town of Aurelius building inspector approves all work done so far on site but indicates that handicap access will be needed for the office and the bathroom.

Sutor Acoustics put up load bearing walls and deck for the office in the treatment building. They then put up the office area sheet rock and finish the north wall of the treatment building.

Clean Harbors pumped out the excavation for the installation of the pipe stubs to the separator pit after it filled with water.

J&E Electric completed wire run from the main panel to the electric pole. J&E also installed an outside flood light on the west corner of the building. In the office, J&E installed the wiring and electrical boxes for switches and outlets.

Mazelli Plumbing began work on office and bathroom plumbing.

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Steven May

WEEKLY CONSTRUCTION REPORT

DATES: 10/6-10/10/97

CONTRACTOR: Clean Harbors Inc.

PROJECT: GE Powerex Construction

LOCATION: Auburn, New York

PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE
Onondaga Construction Systems(OCS)
VIP Structures
Sutor Acoustics
J&E Electric
SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS
<p>OCS prepared for the application of Cafco heat shield by applying a wire mesh to the interior walls where the heat shield overlapped from the ceiling. After the wire mesh was put up, OCS completed two spray coatings of heat shield as specified on the Contract Drawings.</p> <p>VIP Structures performed the following activities during the week: framing of roof ventilators; replaced siding on the north and west sides of the building where required to repair old wall openings; put up flashing around the loading dock door frame; installed bollards on the electrical panel pad; and poured the foundation for the north wall office entrance stairway. The office entrance stairway will be narrowed to 4 ft. 7-1/2 in. wide due to clear the drain pipe from the drive way surface water drainage grate.</p> <p>Sutor began sheet rock finishing and FRP wall board installation on the exterior office walls.</p> <p>Clean Harbors excavated the north wall office stair way foundation and cleaned the driveways at the facility with a sweeper attachment for the bobcat.</p>

DISTRIBUTION: 1. Field Office
 2. Home Office
 3. Project Manager
 4. GE, Paul Hare

OBSERVER Steven May

WEEKLY CONSTRUCTION REPORT

DATES: 10/13-10/17/97
CONTRACTOR: Clean Harbors, Inc.
PROJECT: GE Powerex Construction
LOCATION: Auburn, New York
PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE	
VIP Structures	TAG Mechanical
J&E Electric	Anthis Painting
Sutor Acoustics	
Dependable Door	
Target Roofing	
SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS	
<p>VIP completed the following tasks during this week: prepared and poured the access ramp over the secondary containment wall; installed roof curbs for exhaust ventilators; formed and poured the north office entrance stairway and the addition to the existing electrical pad; and installed all man doors in the building.</p>	
<p>Dependable Door installed the overhead doors in the loading dock and service entrances.</p>	
<p>Sutor Acoustics applied drywall compound and finished drywall sanding in the office area.</p>	
<p>J&E Electric completed high bay light installation and began working on light switch and power outlet conduit runs.</p>	
<p>Target Roofing curbed roof exhaust ventilators to existing grade on stone and pitch roof, repaired known leak areas on roof, and cut holes for building furnace flue gas stacks.</p>	
<p>TAG Mechanical installed the building furnace, placed wall fans in the existing framing, and installed flashing and covers around the outside portion of the wall supply fans.</p>	
<p>Anthis Painting began painting building interior with a primer coat and concrete filler.</p>	

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Steven May

WEEKLY CONSTRUCTION REPORT

DATES: 10/18-10/24/97 (Weekend work on 10/18)

CONTRACTOR: Clean Harbors, Inc.

PROJECT: GE Powerex Construction

LOCATION: Auburn, New York

PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE
VIP Structures
J&E Electric
TAG Mechanical
Anthis Painting
Onondaga Construction Systems
SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS VIP Structures completed the following tasks during the time period; reforming of the concrete stairway to remove imperfections, installation of structural steel and siding on the south exterior wall internal to the existing building, and forming of pipe sleeves for the secondary containment wall pour. J&E Electric continued installation of electrical conduit runs and electrical controls on the east wall. An additional wire will be installed to each wall fan to provide power to wall louvers. TAG Mechanical installed roof ventilators by using a boom truck and crane. Onondaga Construction Systems reapplied Cafco insulation to some sections of the ceiling that were damaged during other activities. Anthis Painting completed painting of all interior and exterior surfaces with the exception of the interior support columns.

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Steven May

WEEKLY CONSTRUCTION REPORT

DATES: 10/27-10/31/97
CONTRACTOR: Clean Harbors, Inc.
PROJECT: GE Powerex Construction
LOCATION: Auburn, New York
PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE
VIP Structures
J&E Electric
Onondaga Construction Systems
Stonhard
Mazelli Plumbing
SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS
Onondaga Construction Systems reapplied Cafco heat shield to disturbed areas on the building ceiling.
Stonhard prepared concrete floor and containment walls for Stonhard application by cleaning with a blastrac machine and hand grinding. Stonhard then applied a primer layer of epoxy that was curing at the end of the week.
VIP Structures poured concrete around the link seals in the secondary containment wall and into two holes in the west wall outside the fifth bay. VIP also installed door closers, door handles, and glass windows on manddoors.
J&E Electric continued running wire through conduit to the various electrical fixtures. It was discovered that the overhead bay light wiring system will not work properly due to longer than anticipated wire runs, resulting in unacceptable voltage losses at the lighting fixtures. Radian's electrical engineer was informed of the situation. J&E relocated the NW exterior flood light to a higher position on the building face.
Clean Harbors, Inc. (CHI) excavated the exterior to building for pipe chase piping. No water runoff protection was installed as per specification 01500. CHI also provided indoor space heaters for the curing of the stonhard application.
Mazelli Plumbing continued work on the office bathroom plumbing.

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Steven May

WEEKLY CONSTRUCTION REPORT

DATES: 11/1-11/7/97
CONTRACTOR: Clean Harbors, Inc.
PROJECT: GE Powerex Construction
LOCATION: Auburn, New York
PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE

VIP Structures

J&E Electrical

Stonhard

Mazelli Plumbing

TAG Mechanical

SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS

VIP Structures completed door hardware installation, including weatherstripping, door jambs, locks, and closers. Fire extinguishers were located and installed. Rock wool was placed in the space between the ceiling and the top of the south wall to provide insulation. Upon completion of the pipe chase outside the separator pit, the excavation was backfilled, stub pipe ends were marked with stakes, and grade was reestablished. VIP additionally formed and poured concrete in the loading dock ramp that was sawcut and removed for the pipe chase excavation.

Stonhard completed application of resinous floor coating to all surfaces specified.

Heavy rain on 11/2 revealed previously undiscovered roof leaks. Clean Harbors, Inc. and Radian temporarily stopped roof leaks so that Stonehard could continue resinous floor coating application. CHI completed the safety railing on the south mezzanine between the 5th and 6th column lines. CHI removed approximately 8,000 gallons of runoff water from the pipe chase excavation. CHI used a mild detergent to clean soot coating (believed to be caused by heater exhaust) off the FRP panels. The pipe chase excavation was reseeded and strawed by CHI upon backfilling.

J&E Electrical installed office lighting and fixtures, then supplied power to them. J&E continued wiring and terminating wall fans and louvers.

Mazelli plumbing completed the stub pipe installation into the pipe chase of the separator pit.

TAG Mechanical supplied 24 volt louver operators which burned out when 120 volts were applied. TAG Mechanical agreed to replace louver actuators with actuators that accepted the correct voltage and will repair the louvers such that they will fully open.

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Steven May

WEEKLY CONSTRUCTION REPORT

DATES: 11/10-11/14/97
CONTRACTOR: Clean Harbors, Inc.
PROJECT: GE Powerex Construction
LOCATION: Auburn, New York
PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE
VIP Structures
J&E Electric
Raulli Iron Works
Target Roofing
SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS
Clean Harbors Inc. moved extra topsoil to North Evaporation Pit. Upon completion of on-site activities, CHI removed equipment and supplies from this site.
VIP Structures cleans debris and dirt from the office and treatment room floor. Upon completion of remaining site activities, VIP demobilized from the site.
J&E Electric connected wiring to HVAC unit in the office, terminated the automatic door opener, and began terminating wire runs in the main panel and motor starter panel.
Raulli Iron delivered and installed the safety railing on the office mezzanine and separator pit. The stairs to the separator pit were also installed.
Target Roofing repaired remaining roof leaks.

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Steven May

WEEKLY CONSTRUCTION REPORT

DATES: 12/8-12/12/97

CONTRACTOR: Central New York H&E Company Inc.

PROJECT: GE Powerex Water Main Work

LOCATION: Auburn, New York

PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE

J&E Electric

Maselli Plumbing

Central New York H&E Company Inc.

SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS

J&E Electric completed installation and testing of interior and exterior light bank contactors.

Maselli Plumbing partially installed the sewer lift pump in the sewer tank, mounted the sewer pump control panel and hard piped the sewer tank vent into the existing vent system.

CNY H&E began working on the water main in the non-hazardous area. A water bypass line was excavated and installed around the existing meter house on W. Genesee Street. Pipes exiting the meter house on the north side were cut and capped. While cutting the 12 inch water main leading into the meter house, a leak developed due to a partially blocked shutoff valve at the street. A metal sleeve lined with rubber was tightened on the leak until the valve could be flushed and sealed. A 12 to 8 inch reducer was placed inline to connect the desired pipe size to the energized line on the north side of the meter house. Post indicator 1 at the SE corner of the Powerex building was excavated. The water line that serviced the east side of the Powerex building was cut and capped downstream of post indicator 1. Wooden blocks were placed between the capped pipes and quickrete cement was placed on the caps. All excavation water was removed with a trash pump and discharged to the ground.

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Scott Daskiewich

WEEKLY CONSTRUCTION REPORT

DATES: 12/15-12/19/97

CONTRACTOR: Central New York H&E Company Inc.

PROJECT: GE Powerex Water Main Work

LOCATION: Auburn, New York

PROJECT NUMBER: 800617

SUBCONTRACTORS ON SITE

Central New York H&E Company Inc.

SUMMARY OF ACTIVITIES/DISCUSSIONS/DECISIONS

CNY H&E continued water main work at the Powerex Site. Post indicators 1,3, and 5 on the building supply lines on the south side of the facility were cut and capped downstream of the shutoff valve. Caps on the valve side of the cut were fastened with tie rods and slip flanges while the building side caps were fastened with slip flanges. Quickrete ready mix concrete covered the caps for added support. Excavations for post indicators 1,3, and 5 were backfilled after the concrete was added. The southern fire hydrant on the west side of the Powerex building (just outside of the hazardous area) was removed along with its housing. The hydrant supply line was cut and capped downstream of the shutoff valve.

On 12/16, CNY H&E began work in the hazardous area with the assistance of two Radian operators. The hydrant housing for the north housing prior to excavation. The cluster of 3 post indicators was excavated. The two southern building supply lines leading from the post indicators were cut, capped, and cemented. The north post indicator was left for service to the treatment building. The northern fire hydrant was excavated, cut, and replaced with a new hydrant and shutoff valve. The fire hydrant excavation was filled after the northern continuation of the water main was cut and capped north of the fire hydrant supply line tee. While excavating the north fire hydrant, it was discovered that the culvert pipe in the ditch in front of the hydrant was transite(asbestos composite). The pipe was removed and wrapped in plastic pending further action.

DISTRIBUTION: 1. Field Office
2. Home Office
3. Project Manager
4. GE, Paul Hare

OBSERVER Scott Daskiewich

APPENDIX B
ANALYTICAL RESULTS



A FULL SERVICE ENVIRONMENTAL LABORATORY

August 14, 1997

Mr. James Roff
Clean Harbors
32 Bask Road
Glenmont, NY 12077

PROJECT:GENERAL ELECTRIC
Submission #:9708000107

Dear Mr. Roff:

Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 08/14/97 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at (716) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Janice Jaeger
Janice Jaeger
Project Chemist

Enc.

This package has been reviewed by Columbia Analytical Services, QA Department/Laboratory Director prior to report submittal *Michael K. [Signature]*

1 Mustang St. • Suite 250 • Rochester, NY 14608 • Tele:(716)288-5380 • Fax:(716)288-8475
65 Ramo Vally Rd. • Suite 16 • Mahwah, NJ 07430 • Tele:(201)512-3292 • Fax:(201)512-3362
12699 Roll Rd. • Akron, NY 14001 • Tele:(716)542-1264 • Fax:(716)542-3353

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8081 PCB'S
Reported: 08/14/97

Clean Harbors
Project Reference: GENERAL ELECTRIC
Client Sample ID : SOIL PILE

Date Sampled : 08/04/97 Order #: 161129 Sample Matrix: SOIL/SEDIMEN
Date Received: 08/05/97 Submission #: 9708000107 Percent Solid: 96.1

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED	: 08/09/97		
DATE ANALYZED	: 08/10/97		
ANALYTICAL DILUTION:	1.0		Dry Weight
PCB 1016	250	260 U	UG/KG
PCB 1221	250	260 U	UG/KG
PCB 1232	250	260 U	UG/KG
PCB 1242	250	260 U	UG/KG
PCB 1248	250	260 U	UG/KG
PCB 1254	250	260 U	UG/KG
PCB 1260	250	260 U	UG/KG
<u>SURROGATE RECOVERIES</u>		<u>QC LIMITS</u>	
DECACHLOROBIPHENYL	(30 - 150 %)	105	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	111	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015 GRO
Reported: 08/14/97

Clean Harbors
Project Reference: GENERAL ELECTRIC
Client Sample ID : SOIL PILE

Date Sampled : 08/04/97 Order #: 161129 Sample Matrix: SOIL/SEDIMEN
Date Received: 08/05/97 Submission #: 9708000107 Percent Solid: 96.1

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 08/13/97			
ANALYTICAL DILUTION: 1.0			Dry Weight
GASOLINE RANGE ORGANICS	100	100 U	UG/KG
<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
CHLOROFLUOROBENZENE (FID)	(60 - 140 %)	104	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS

METHOD 8081 PCB'S

Reported: 08/14/97

Project Reference:

Client Sample ID : METHOD BLANK

Date Sampled : Order #: 161623 Sample Matrix: SOIL/SEDIMEN
 Date Received: Submission #: Percent Solid: 100

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/09/97			
DATE ANALYZED : 08/10/97			
ANALYTICAL DILUTION: 1.0			Dry Weight
PCB 1016	250	250 U	UG/KG
PCB 1221	250	250 U	UG/KG
PCB 1232	250	250 U	UG/KG
PCB 1242	250	250 U	UG/KG
PCB 1248	250	250 U	UG/KG
PCB 1254	250	250 U	UG/KG
PCB 1260	250	250 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

DECACHLOROBIPHENYL	(30 - 150 %)	98	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	103	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015 GRO
Reported: 08/14/97

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : Order #: 162253 Sample Matrix: SOIL/SEDIMEN
Date Received: Submission #: Percent Solid: 100

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 08/13/97			
ANALYTICAL DILUTION: 1.0			Dry Weight
GASOLINE RANGE ORGANICS	100	100 U	UG/KG
SURROGATE RECOVERIES	QC LIMITS		
CHLOROFLUOROBENZENE (FID)	(60 - 140 %)	107	%



Effective 04/01/96

CAS LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

- U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. For further explanation see case narrative / cover letter.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- N - Spiked sample recovery not within control limits.
(Flag the entire batch - Inorganic analysis only)
- * - Duplicate analysis not within control limits.
(Flag the entire batch - Inorganic analysis only)
 - Also used to qualify Organics QC data outside limits.
- D - Spike diluted out.
- S - Reported value determined by Method of Standard Additions. (MSA)
- X - As specified in the case narrative.

CAS Lab ID # for State Certifications

NY ID # in Rochester:	10145	NJ ID # in Rochester:	73004
CT ID # in Rochester:	PH0556	RI ID # in Rochester:	158
MA ID # in Rochester:	M-NY032		

APPENDIX C
COMPACTION TESTING RESULTS

IN-PLACE DENSITY TEST RESULTS

PROJECT: AUBURN POWEREX PLANT

PROJECT NO: RCH-97-276

CLIENT: CLEAN HARBORS

DATE: 8-7-97 PG 1 OF 1

CONTRACTOR: CLEAN HARBORS

REPORT NO: FR-01

TEST NO.	LOCATION	DEPTH OR ELEV.	DRY DENSITY [PCF]	MOIST. CONTENT [%]	COMP. [%]	SAMPLE NO.
1	WASTE SOLVENT TANK PIT (FUTURE P.L.)	-4'FG	125.4	2.7	87.1	97-674
2	" " " "	-3'FG	126.6	4.4	87.9	97-674
3	" " " "	-2.5'FG	131.6	2.3	91.4	97-674
4	" " " "	-2'FG	130.2	2.8	90.4	97-674

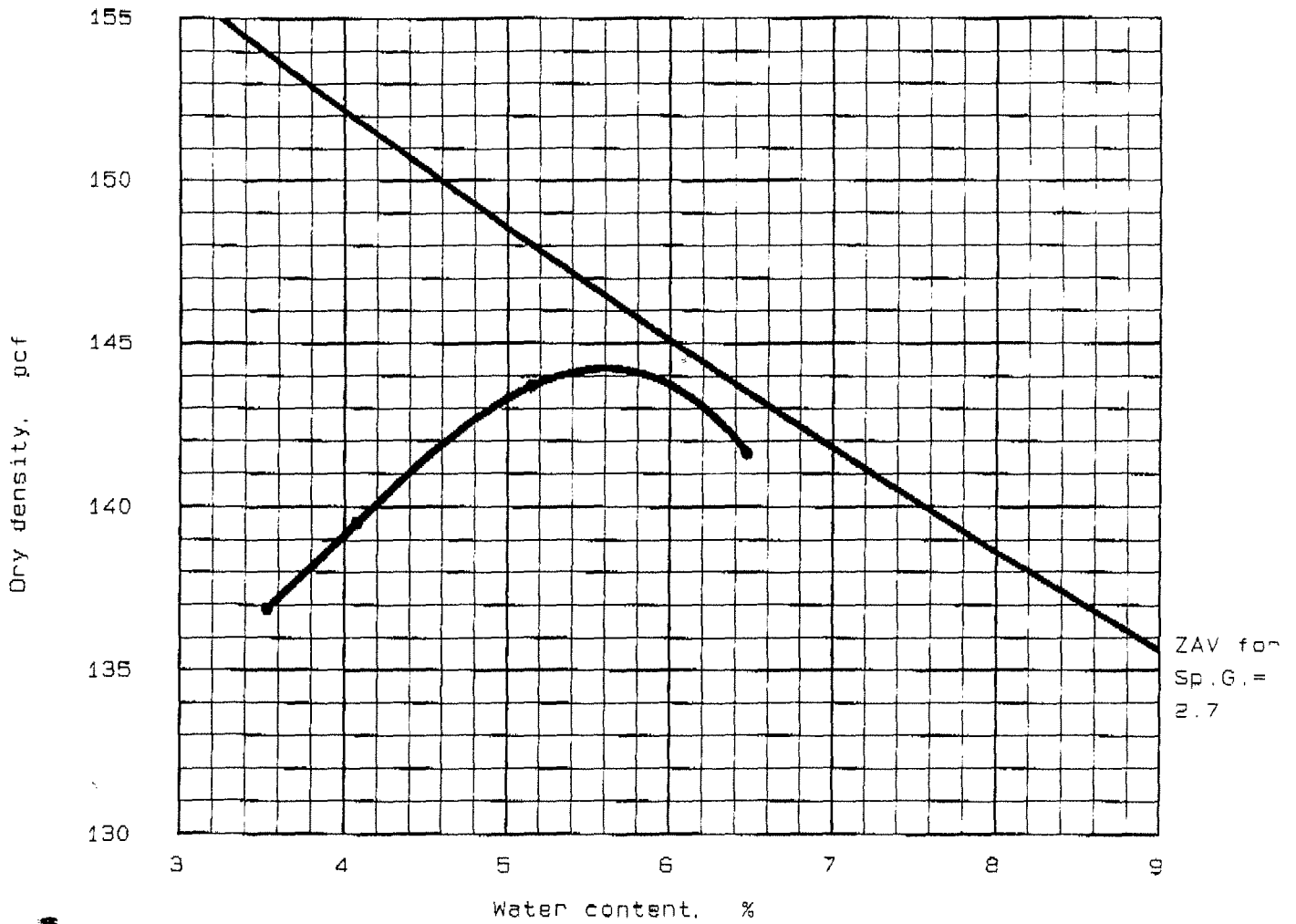
SAMPLE NO.	MAXIMUM D.D. (PCF)	OPT. % MOISTURE	SAMPLE DESCRIPTION
97-674	144.0	5.5	SAND AND GRAVEL

REMARKS: FG=FINISHED GRADE, P.L.=PARKING LOT. SCOTT DASKIEWICH (ASSOCIATE ENGINEER WITH RADIAN INTERNATIONAL) WAS PRESENT AT THE TIME THE ABOVE TESTS WERE TAKEN, AND WAS INFORMED OF THE RESULTS. THE PROCTOR NUMBER WAS NOT AVAILABLE AT THE TIME THE TESTS WERE TAKEN.

PREPARED BY: Kevin Mahe

REVIEWED BY: 

PROCTOR TEST REPORT



"Modified" Proctor, ASTM D 1557, Method C

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No. 200
	USCS	AASHTO						

TEST RESULTS	MATERIAL DESCRIPTION
--------------	----------------------

Optimum moisture = 5.5 % Maximum dry density = 144.0 pcf	Gravel and Sand
---	-----------------

Project No.: RCH-97-276 Project: Auburn Powerex Plant Location: Auburn, New York Date: 8-8-97	Remarks: Sample picked up by Van Der Horst on 8-7-97
--	--

PROCTOR TEST REPORT VAN DER HORST ENGINEERING	Figure No. 674
---	----------------

APPENDIX D
COLIFORM TESTING RESULTS



Central New York H & E Co., Inc.

146 York Street, Auburn, N.Y. 13021 (315) 252-9339

January 12, 1998

Mr. James Siegfried, P.E.
Radian Engineering, Inc.
155 Corporate Woods
Suite 100
Rochester, New York 14623

RE: Waterline Work
Former Powerex Site, Auburn, NY
Subcontract #751280.US

Dear Mr. Siegfried:

Enclosed is a copy of the water sample analysis taken from the former Powerex site.

This line should be flushed again at the hydrant and inside of the building to clear the short stub from the main to the inside of the building once hookup is complete if you are using the water for domestic purposes.

If you should have any questions, please contact my office.

Respectfully,

James E. Schooley
President

ENC



ENVIRONMENTAL LABORATORIES

SAMPLING ■ ANALYSIS ■ REPORTS ■ CONSULTATION

NYSDOH ELAP 10081
Daniel M. Panek, Director

FINAL REPORT OF ANALYSES

CNY HAULING & ERECTING
146 YORK ST.
AUBURN, NY 13021-

PROJECT NUMBER: 0082-L
REPORT DATE: 01/07/98

POWEREX - GENESEE ST.

SAMPLE NUMBER- 16014	SAMPLE ID- 0198-1007	SAMPLE MATRIX- WA
DATE SAMPLED- 01/05/98	LOCATION- FIRE HOSE - END OF LINE	TIME SAMPLED- 1010
DATE RECEIVED- 01/05/98	SAMPLER- JES	RECEIVED BY- DMP
TIME RECEIVED- 1105	DELIVERED BY- JES	TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT UNITS	DET. LIMIT
COLIFORM - TOTAL	SM17 9222B	01/05/98	SDH	< 1 col./100ml	1

<: Less Than. These results indicate the water WAS of a SATISFACTORY sanitary quality at the time of collection.

APPROVED FOR RELEASE

APPENDIX E
CHEMICAL ANALYSES OF OIL TESTING



RECRA
LabNet

a division of Recra Environmental, Inc.

Virtual Laboratories Everywhere

July 14, 1997

Mr. Darrin Costantini
Radian Corporation
155 Corporate Woods, STE 100
Rochester, NY 14623

RE: Analytical Results

Dear Mr. Costantini:

Enclosed are the results concerning the analysis of the sample submitted by your firm. The pertinent information regarding this analysis is listed below:

Quote #: NY97-251
Program: GE Project - Rush PCBs
Matrix: Oil
Sample Received: 07/09/97
Sample Date: 07/08/97

If you have any questions concerning these data, please contact me at (716) 691-2600 and refer to the I.D. number listed below. It has been our pleasure to provide Radian Corporation with environmental testing services. We look forward to serving you in the future.

Sincerely,

RECRA ENVIRONMENTAL, INC.

A handwritten signature in cursive script that reads "Candace L. Fox".

Candace L. Fox
Program Manager

CLF/mfg
Enclosure

I.D. #A97-2380
#NY7A6720

This report contains 8 pages which are individually numbered.

ANALYTICAL RESULTS

Prepared For:

Radian Corporation
155 Corporate Woods, STE 100
Rochester, NY 14623

Prepared By:

Recra Environmental, Inc.
10 Hazelwood Drive, Suite 106
Amherst, New York 14228-2298

METHODOLOGY

The specific methodologies employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method number presented refers to the following U.S. Environmental Protection Agency reference:

- * "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846), Third Edition, September 1994, United States Environmental Protection Agency Office of Solid Waste.

COMMENTS

Comments pertain to data on one or all pages of this report.

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic Data Comment Page.

Preliminary results were sent via facsimile to Mr. Darrin Costantini of Radian Corporation on July 11, 1997 by Ms. Candace Fox of Recra Environmental.

ORGANIC DATA

No deviations from protocol were observed during the analytical procedures.

"This data report shall not be reproduced, except in full,
without the written authorization of Recra LabNet."



000002

ORGANIC DATA COMMENT PAGE

Laboratory Name: Recra Labnet, Inc.

USEPA Defined Organic Data Qualifiers:

- U - Indicates compound was analyzed for but not detected.
- J - Indicates an estimate value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- T - This flag is used when the analyte is found in the associated TCLP extraction blank as well as in the sample.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results.
- P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- A - This flag indicates that a TIC is a suspected aldol-condensation product.



Client Sample ID: 070897E		070897W				
Job Number & Lab Sample ID: A97-2380 A7238001		A97-2380 A7238002				
Sample Date: 07/08/97		07/08/97				
Analyte (UG/KG)	RL	Result		Result		
METHOD 8081 - POLYCHLORINATED BIPHENYLS						
Aroclor 1016	40	300	U	320	U	
Aroclor 1221	80	300	U	320	U	
Aroclor 1232	40	300	U	320	U	
Aroclor 1242	40	300	U	320	U	
Aroclor 1248	40	300	U	320	U	
Aroclor 1254	40	300	U	320	U	
Aroclor 1260	40	300	U	320	U	
SURROGATES						
Tetrachloro-m-xylene	40-148	80		96		
Decachlorobiphenyl	58-150	80		84		

* Indicates Result is Outside QC Limits
 NA = Not Applicable

000003

Client Sample ID:		Matrix Spike Blank	Matrix Spike Blk Dup	Method Blank		
Job Number & Lab Sample ID:		A97-2380 A7B0564301	A97-2380 A7B0564302	A97-2380 A7B0564303		
Sample Date:						
Analyte	(UG/KG)	RL	Result	Result	Result	
METHOD 8081 - POLYCHLORINATED BIPHENYLS						
Aroclor 1016		40	320 U	320 U	320 U	
Aroclor 1221		80	320 U	320 U	320 U	
Aroclor 1232		40	320 U	320 U	320 U	
Aroclor 1242		40	56000	55000	320 U	
Aroclor 1248		40	320 U	320 U	320 U	
Aroclor 1254		40	320 U	320 U	320 U	
Aroclor 1260		40	320 U	320 U	320 U	
SURROGATES						
Tetrachloro-m-xylene		40-148	128	124	107	
Decachlorobiphenyl		58-150	138	124	110	

* Indicates Result is Outside QC Limits
 NA = Not Applicable

000004

METHOD 8081 - POLYCHLORINATED BIPHENYLS

Client Sample ID Job No & Lab Sample ID	070897E A97-2380 A7238001	070897W A97-2380 A7238002			
Sample Date	07/08/97 15:00	07/08/97 15:00			
Received Date	07/09/97 09:30	07/09/97 09:30			
Extraction Date	07/09/97 07:00	07/09/97 07:00			
Analysis Date	07/11/97 10:05	07/11/97 09:48			
Extraction HT Met?	YES	YES			
Analytical HT Met?	YES	YES			
Sample Matrix	OIL	OIL			
Dilution Factor	1.0	1.0			
Sample wt/vol	0.2139 GRAMS	0.2049 GRAMS			
% Dry	100.00	100.00			

000005

METHOD 8081 - POLYCHLORINATED BIPHENYLS

Client Sample ID Job No & Lab Sample ID	Matrix Spike Blank A97-2380 A7B0564301	Matrix Spike Blk Dup A97-2380 A7B0564302	Method Blank A97-2380 A7B0564303		
Sample Date					
Received Date					
Extraction Date	07/09/97 07:00	07/09/97 07:00	07/09/97 07:00		
Analysis Date	07/11/97 09:32	07/11/97 09:15	07/11/97 08:58		
Extraction HT Met?	-	-	-		
Analytical HT Met?	-	-	-		
Sample Matrix	OIL	OIL	OIL		
Dilution Factor	1.0	1.0	1.0		
Sample wt/vol	0.2 GRAMS	0.2 GRAMS	0.2 GRAMS		
% Dry	100.00	100.00	100.00		

900000

Client Sample ID: Method Blank
Lab Sample ID: A7B0564303Matrix Spike Blank
A7B0564301Matrix Spike Blk Dup
A7B0564302

Analyte	Units of Measure	Concentration		Spike Amount		% Recovery			% RPD	QC LIMITS	
		Spike Blank	Spike Blank Dup	SB	SBD	SB	SBD	Avg		RPD	REC.
METHOD 8081 - POLYCHLORINATED BIPHENYLS Aroclor 1242	UG/KG	56000	55000	50000	50000	112	110	111	2	30.0	39-150

* Indicates Result is outside QC Limits
 NC = Not Calculated ND = Not Calculated

29

274 0398 123

Chain of Custody Record

PROJECT GE Powerex			NO. OF CONTAINERS	EPA 80350 PCB	ANALYSES							REMARKS	SAM ID NO. (for lab use only)
SITE Auburn NY													
COLLECTED BY (Signature) Scott Vasquez													
FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME											
070897E	liquid/oi	7/8/97 1500	1	1	-	-	-	-	-	-			
070897W	"	" "	1	1	-	-	-	-	-	-			
REMARKS											RELINQUISHED BY: Scott Vasquez	DATE 7/8/97	TIME 1600
RECEIVED BY: Coolidge	DATE 7/8/97	TIME 0930	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME		
LAB USE ONLY													
RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:			DATE	TIME	TEMP °C	SEAL #	CONDITION		
REMARKS													

274 0398 123
274 0398 123

4-88-30337
800000

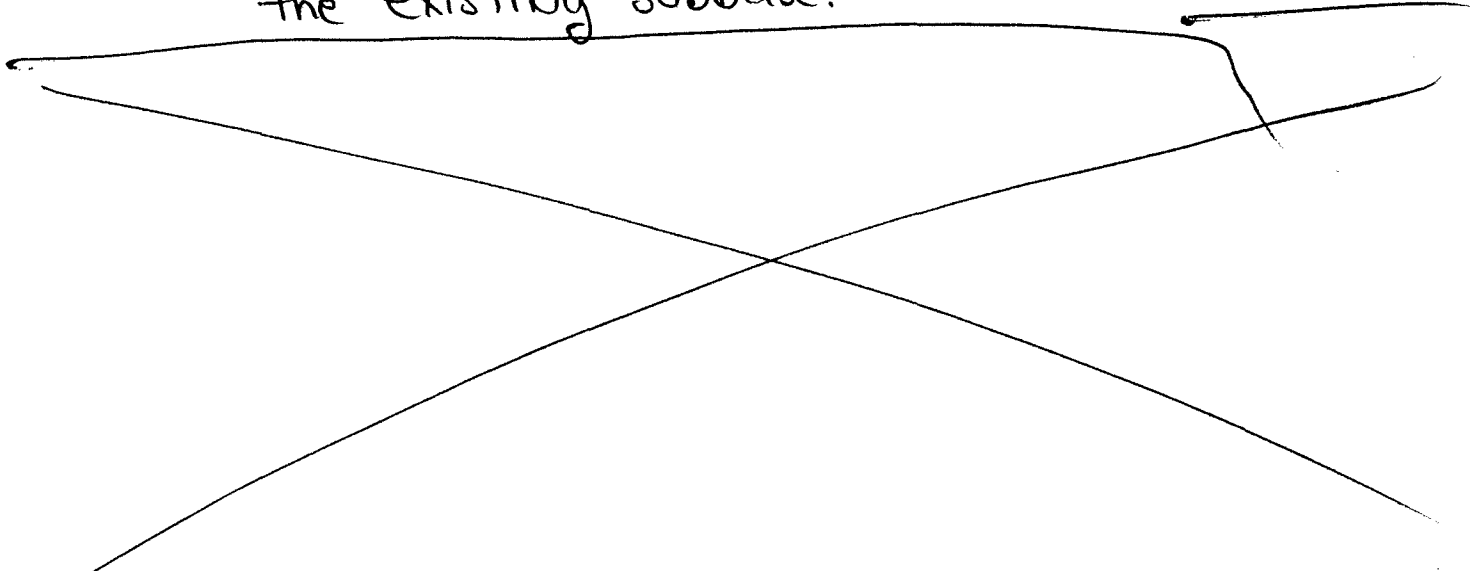
APPENDIX F
WORK CLARIFICATIONS

WORK CLARIFICATION NUMBER _____ PROJECT NUMBER _____ DATE 8/21/97
PROJECT GE Powerex - Site Preparation
PROJECT LOCATION Auburn, New York
TO VIP Structures (Contractor)

The following clarification of the Work is issued in response to Contractor's Request for Information (RFI) No. _____ dated _____
Contractor Discussion

Regarding the eastern lift station ("Dock B"):

- ① ALL portions of the hydraulic lift must be removed. flush with existing concrete.
- ② The concrete at the bottom of the pit need NOT be removed.
- ③ The lift may be backfilled with NYS DOT No. 2 Crushed Stone to the elevation of the existing subbase.



Reference _____

Dwg No. Sheet A-3 Sec B-B Spec'n No. _____ Detail No. _____

- DISTRIBUTION:
- 1. PROJ. MGR.
 - 2. FIELD OFFICE
 - 3. OWNER
 - 4. FILE

SIGNATURE Dani J. Costantini DATE 8/21/97

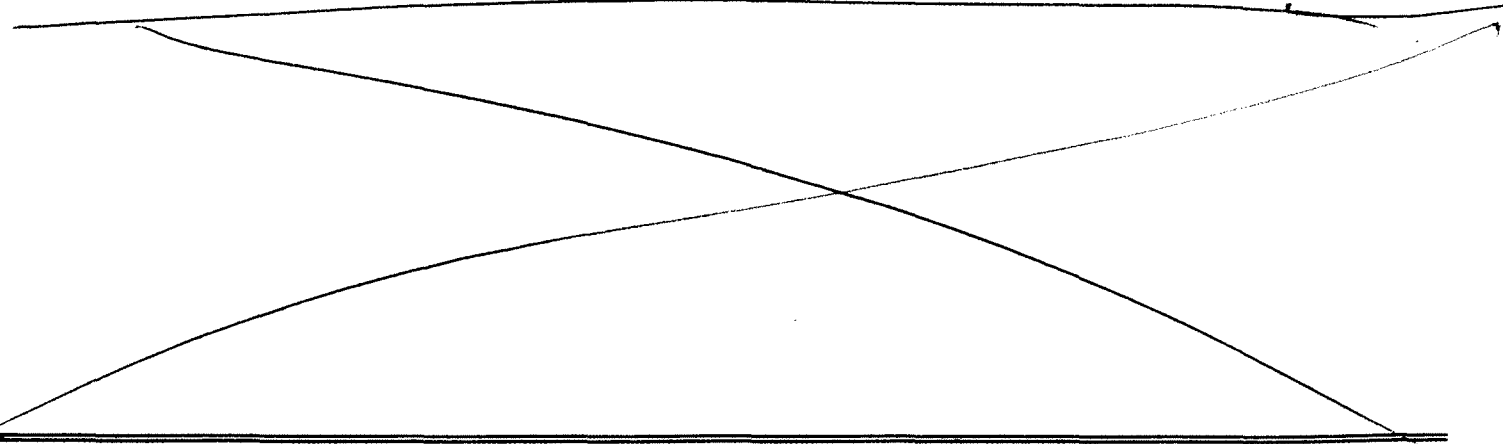
ACKNOWLEDGED James [Signature] DATE 8/21/97

WORK CLARIFICATION NUMBER _____ PROJECT NUMBER _____ DATE 8/21/97
PROJECT GE Powerex - Site Preparation
PROJECT LOCATION Joburn, New York
TO VIP Structures (Contractor)

The following clarification of the Work is issued in response to Contractor's Request for information (RFI) No. _____ dated _____
Conversation w/ Contractor

Regarding Building Dimensions

- ① It is noted that the 1st Bay is 19'-0" (Column Q to Q), not 20'-0", as specified on the drawings.
- ② Measurements should be made from column 5, which is 79'-0" (Q to Q) from column 1, not 80'-0", as ^{DJC}~~specified~~ specified on the drawings.
- ③ The lift station pit should be located off the back wall and/or column 3.



Reference _____
Dwg No. _____ Spec'n No. _____ Detail No. _____

- DISTRIBUTION:
- 1. PROJ MGR
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ACKNOWLEDGED James Bush DATE 8/21/97