

**Work Plan
Brownfield Environmental Restoration Project
Lot 6, Riverside Technology Park
City of Schenectady, New York**

Prepared For:

**City of Schenectady Industrial Development Agency
P.O. Box 68
Schenectady, New York 12301-0068**

Prepared by:

**Valley Equipment Company
16 Wilber Avenue
Schenectady, New York**

December 2004

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1.0 INTRODUCTION

1.1 SITE DESCRIPTION

The Riverside Technology Park Brownfield project site (Brownfield Site No. B00053-4) is Lot No. 6 of the Industrial Park. It is a 2.44 acre parcel located on the north side of Technology Drive, and bordered to the north by the City of Schenectady wastewater treatment facility and the Mohawk River. It is bordered to the west by Lot No. 7 (recently redeveloped by Bitwise Designs, Inc.) and to the east by Anthony Street. Riverside Technology Park is a 40 acre tract of land in Schenectady County that was donated to the City of Schenectady in 1982. The City of Schenectady Industrial Development Agency is redeveloping the tract for the establishment of a number of light industrial businesses. Lot No. 6 is located on the north side of Technology Drive and adjacent to the City of Schenectady wastewater treatment facility and the Mohawk River.

The Site was part of the former Sousa Petroleum Bulk Storage Facility. This storage facility was operated until the late 1960's which resulted in the disposal of hazardous substances, including petroleum contamination in the subsurface soils and the groundwater. A number of the petroleum-derived constituents including ethylbenzene, xylene and acetone are above applicable SCG's (Standards, Criteria and Guidance) and are to be removed. The SCG for total volatile substances of 10 parts per million (ppm) has also been exceeded. These criteria as well as visual indications of petroleum product will be evidence of clean-up criteria exceedance.

1.1.1 CURRENT SITE CONDITIONS

Current site conditions have been photographed and are presented in Appendix A.

1.2 OPERATIONAL/DISPOSAL HISTORY

A portion of the eleven acre Sousa Petroleum Bulk Storage Facility existed on the site until the late 1960's, at which time it was decommissioned. During its operation, the terminal contained seven major oil tanks (designated as Tank 1 through Tank 7) with a total volume of roughly 8.8 million gallons, and the two smaller non-designated tanks of unknown volume. Previous investigations revealed that former Storage Tanks No. 6 and No. 7, along with two smaller non-designated storage tanks, were situated within the Brownfield site. Most of the former tank sites are west of the project site.

1.3 REMEDIAL HISTORY

In 1982, ownership of the former Sousa facility was transferred to the City of Schenectady Industrial Development Agency (COSIDA). A field inspection of the former petroleum storage facility was performed and consisted of the completion of five soil borings and groundwater analysis. The resulting report concluded that, "...petroleum products were evident in the soils and groundwater. However, based on sampling and analysis that was undertaken, we find no indication of significant concentrations of hazardous materials in the groundwater."

In 1990, the above ground storage tanks (AST's) and manmade structures associated with the former Sousa Petroleum Bulk Storage Facility were removed under the guidance of the Region 4 NYSDEC Office. A subsequent Phase II field study advanced seven more soil borings and analyzed composite soil samples. It was determined that unacceptable levels of petroleum-derived constituents were present. NYSDEC was notified, and the site was subsequently investigated under the NYS Spill Program and assigned Spill No. 9109934 to the site.

In 1996, test pits were observed and sampled in anticipation of road construction for the proposed Riverside Technology Park. Light to heavy contamination of soils and groundwater was observed in six of the nine test pits located within Lot No. 6 and 7. Additional studies were conducted under the NYSDEC Brownfields Program during 2000 to 2003. The purpose of the SI (Site Investigation) was to define the nature and extent of any contamination resulting from previous activities at the site. The SI was conducted in three phases. The first phase was conducted between June and September 2000, the second phase between September and November 2001, and a third phase, during August 2002. A report entitled, "Site Investigation/Remedial Alternatives Report Brownfield Environmental Restoration Project No. B00053-4; Lot No. 6 – Riverside Technology Park; December 2002" has been prepared which describes the field activities and findings of the SI in detail.

1.4 PROJECT DESCRIPTION

The following is a list of major work items required by the Contract Documents:

1. Site mobilization and preparation including work areas, drainage controls, and erosion controls;
2. Decommissioning and removal of eight (8) existing ground water monitoring wells;
3. Excavating and disposing of approximately 6,200 tons (3,675 cubic yards) of petroleum contaminated soil;
4. Dewatering of the anticipated excavation area with collection and disposal of the excavation water to the City of Schenectady sewer system (see Appendix B), possibly with pre-treatment by carbon filtration;
5. Placing and compacting earth fill materials in the completed excavation with site restoration to pre-existing grades;
6. Performing QA/QC soil and water testing.

2.0 SITE PREPARATION

2.1 SITE ACCESS

Access to the site will be from the North, from/to Anthony Street. An on-site access road will be constructed for this project and will be removed at the end of the contract.

2.2 UTILITIES

Utilities to the site will be marked out prior to the start of work. Upon completion of the contract, temporary utilities will be removed.

- For decontamination purposes the site water requirements have been determined and adequate potable water from off-site sources will be provided.
- A high pressure wash system will be provided for the equipment decontamination pad and will be suitably sized to provide a minimum pressure of 500 psi and 0.5 gallons per minute flow and a nominal temperature of 200°F. The wash units for equipment decontamination will be a self-contained, portable high pressure water or steam units.
- Wash water from the equipment decontamination pad will drain into a sump adjacent to the wash pad. The water will then be pumped from the sump to a temporary holding tank and finally disposed in accordance with Federal and State environmental regulations. The wash water will be disposed of in accordance with the Construction Water Management Plan, Section 02511 of the Design Report if relevant requirements are met. If requirements are not met, wash water will be treated on-site by the treatment system or if on site treatment is not sufficient to allow discharge into the City of Schenectady sewer system then off-site disposal will be arranged by the Contractor. Prior to any off site disposal deemed necessary, agreement between the contractor and the disposal facility will be submitted to the Engineer for approval

All utilities will be maintained in accordance with Section 02011 of the Design Report

2.3 TEMPORARY FACILITIES

Temporary facilities to be established on site include::

1. Sanitary Facilities
2. Emergency medical facilities in accordance with OSHA.
3. Meteorological station to support air monitoring.
4. Decontamination and equipment storage.
5. Excavation Survey Grid

General layouts of temporary site facilities including trailers, emergency medical facilities, parking areas and equipment lay down areas are shown on The Work Plan- Site Plan and will be in strict accordance with Section 02011 of the Design Report.

2.4 STAGING AREAS

Staging areas for temporary containment of contaminated soil prior to off site disposal are shown on the Work Plan- Site Plan, Figure 1. The staging area will be bermed with a

40 mil watertight liner covering the berm and the entire footprint of the berm. The floor of the staging area will be sloped to a sump lined as to achieve its water-tightness.

Sufficient precautions to ensure the integrity of the liner during will be taken. When no longer needed, the liner will be properly disposed of in accordance with the Material Handling Plan (see Appendix C) At a minimum a 20 mil sealed, watertight liner will cover staged materials at all times to prevent contaminated runoff.

All staging areas will be constructed in such a way as to prevent the spread of contamination to the surrounding soils, surface water, or groundwater.

2.5 CONSTRUCTION DEWATERING FACILITY

Dewatering system for saturated excavated material is shown in The Treatment System Simplified Flow Schematic Figure 2. The plans and specifications for these areas is detailed in the Materials Handling Plan (Appendix C)

All water generated from this dewatering system (and also from any excavation dewatering) will be managed, treated and discharged in accordance with all relevant standards, regulations and guidance. All construction water will be handled in accordance with the Construction Water Management Plan as shown in Section 02511 of the Design Report and Section 3.2 Excavation Dewatering of the Work Plan.

2.6 CERTIFIED WEIGHT FACILITY

A scale ticket from a certified landfill facility (Albany County Landfill) will be issued prior to and after each load is discarded. The legal load limits on all public roads will be strictly observed.

2.7 FENCING

A temporary, secure 5 foot high construction fence will be installed in accordance to Section 02011 of the Design Report. Temporary fencing will be removed and properly disposed at the completion of the work.

2.8 CLEARING

Areas will be cleared as needed for excavation of contaminated soils. This clearing shall be performed in accordance with Section 02110 of the Design Report.

2.9 EROSION & SEDIMENTATION CONTROLS

Erosion and sedimentation control procedures will be implemented down-gradient of the perimeter of work areas and will occur as required immediately following any clearing or surface disturbance activities.

2.10 SUBMITTALS – SITE UTILIZATION PLAN

A Site Utilization Plan will be prepared and submitted to the Engineer. This plan will clearly indicate how the site shall be utilized, managed and maintained to complete the required Work. The plan will be consistent with, and may be coincident with, other Plans prepared in accordance with Section 01300.

2.10 COLD WEATHER OPERATIONS

During cold weather and cold season storms, all necessary steps to protect the site to maintain project facilities and equipment and to keep work progressing will be taken. Those steps will include, but not be limited to:

- Maintain site access and clear snow and sleet as required. Snow and sleet collected in work areas will be considered construction water and treated as such.
- Protect equipment from freezing, including pumps, excavation equipment, water storage and water pre-treatment system equipment, and all pipes, hoses, and other means of water conveyance. In the event that equipment is damaged or inoperable due to freezing or cold weather conditions, the equipment will be promptly repaired or replaced.
- Protect all Health & Safety and environmental monitoring equipment and instruments from damaging weather to insure proper operation, and/or adjust to cold weather procedures, and/or provide alternate equipment and instruments.

3.0 EXCAVATION ACTIVITIES

Excavation Activities will consist of: earthwork; excavation dewatering; trenching, pipe backfilling and compaction; water pre-treatment and excavation and disposal of contaminated soils and materials.

3.1 EARTHWORK

Details of the procedures to implement the required seeding and to obtain offsite backfill materials are outlined in Section 02200 of the Design Report. Valley Equipment Company will strictly follow those procedures.

3.2 EXCAVATION DEWATERING

Dewatering, as necessary in order to efficiently and accurately excavate contaminated soil below the water table in excavations or trenches in the vicinity of Area A and Area B, will take place in strict accordance to Section 02220 of the Design Report.

In summary, this task will consist of the following activities:

- Valley Equipment Company will provide and maintain proper and satisfactory means and devices for the removal of all water entering the excavations and will

- remove all such water as fast as it may collect in such manner as shall not interfere with the continuance of the work.
- A 3500 and 7500 gallon vacuum truck will be utilized for removal of water as needed.
 - Water pumped or drained from the excavation encountered in the work, shall be treated and disposed of as described in the approved Construction Water Management Plan without injury to the work under construction or to roads or water courses. Figure 2 shows a schematic drawing of the water treatment system

3.2.1 EXCAVATION DEWATERING PLAN

An Excavation Dewatering Plan, consistent and in accordance with the Construction Water Management Plan (Section 02511 of the Design Report) will be submitted. This Plan will describe the means and methods of dewatering the required areas prior to excavation and will include a description of materials, locations, depths, discharge, and pre-treatment (if necessary) to be utilized in the collection and disposal of removed waters.

3.2.2 TEMPORARY ELECTRIC POWER

All power required to accomplish the required dewatering, will be provided by a 50 KW portable generator that will be brought on site and maintained by Valley Equipment Company. All temporary power facilities will be removed upon completion of required excavation and backfilling.

3.3 TRENCHING, PIPE BACKFILLING AND COMPACTION

All labor, materials, equipment, and services necessary for, and incidental to, the excavation of trenching, backfilling, compacting, dewatering, protection and disposal, from excavations required for dewatering facilities and work adjacent to the City of Schenectady sewer lines, will be provided as described in Section 0221 of the Design Report.

3.4 WATER PRE-TREATMENT

Valley Equipment Company will furnish all manpower, equipment, and materials, and execute all activities necessary to provide, install and operate a temporary water treatment system as specified in Section 02225 of the Design Report. The temporary water treatment system will be utilized during construction to provide for the treatment of all water generated during the performance of the Contract that exceeds the limitations of the discharge effluent limitations of the City of Schenectady Wastewater Treatment Plant. See Appendix B for City of Schenectady temporary discharge permit.

A temporary water treatment system capable of handling a continuous flow rate for the period of construction, including furnishing all power and electrical connections required for the operation of the temporary treatment system will be constructed. Figure 2 shows a detailed schematic of that treatment system.

3.5 EXCAVATION AND DISPOSAL OF CONTAMINATED SOILS

All work associated with the excavation, staging, storing, dewatering, transportation, and disposal of non-hazardous, petroleum-contaminated, excavated soils exceeding site-specific, soil cleanup objectives are included in this activity. The cleanup objectives for soil at the Riverside Lot 6 are:

- Individual Volatile Organic Compounds (VOCs) at/or less than 10 parts per million (ppm) and
- ethyl benzene at/or less than 5.5 ppm and xylene at/or less than 1.2 ppm, and/or
- Total Volatile Organic Compounds (VOCs) less than 100 parts per million (ppm).

The area and volume of contaminated soil to be removed are identified as within Area A and Area B on the Contract Plans, the actual limits of which shall be determined at the time of excavation by field screening of VOCs by PID. Tasks under this section include the management and disposal of contaminated soils in a solid waste landfill.

4.0 MONITORING WELL DECOMMISSIONING

The 8 monitoring wells were constructed of 2-inch diameter schedule 40 PVC piping to depths ranging from 16 ft. to 37 ft. below grade. These wells mostly consist of 10 feet of 0.01 machine slot screen with a threaded bottom plug and flush threaded into schedule 40 PVC riser pipe of the same diameter. The top of each well is equipped with vented non-threaded cap. The 2 deep wells (HC-2d and HC-4d) are bedrock wells and are of a similar construction except that slotted screen is installed into a drilled rock socket. All the wells were finished with two or three foot thick concrete plug and surface work pad and equipped with a locking protective steel casing. The 8 monitoring wells are located on the Contract Drawings as HC-1, HC-2s, HC-2d, HC-3, HC-4s, HC-4d, HC-5, and HC-6 in the Design Report.

Wells will be decommissioned in accordance with specifications outlined in Section 02120 on the Design Report.

Standard Operating Procedure Regulating Decommissioning Piezometers and Monitoring Wells

Section 02120 Monitoring Well Decommissioning contains the proper decommissioning procedures existing in the Department's "Monitoring Well Decommissioning Guidance" (drafted October 1996).

1. Prior to beginning at each location, the equipment and tools used in the decommissioning must be decontaminated at a site decontamination pad following the procedures detailed in the Valley's HASP for Riverside site.
2. Removal method involves removing the well casing by lifting. The procedure must allow grout to be added during the pulling operation. Grout will fill space once occupied by the material being withdrawn.

3. The Cement/Bentonite Grout shall consist of a mixture of 2-5 pounds of pure bentonite powder per 94 pound base of Portland Cement Type I or II with 7-8 gallons of water. Products and additives shall be mixed in accordance with manufacturer's specs.

5.0 REFERENCES

ECS, September 2004. Health and Safety Plan, Brownfield Environmental Restoration Project Lot No. 6, Riverside Technology Park, City of Schenectady. File No 01-202506.00. Prepared for Valley Equipment Company.

Holt Consulting, 2003. Design Phase Work Limit Investigation Report, Brownfield Environmental Restoration Project. Lot 6, Riverside Technology Park, City of Schenectady, New York. Prepared for the City of Schenectady Industrial Development Agency.

Holt Consulting, 2004. Design Report Bid Documents & Specifications, Brownfield Environmental Restoration Project, Lot No. 6, Riverside Technology Park, City of Schenectady, New York. Prepared for the City of Schenectady Industrial Development Agency.

City of Schenectady, Department of Engineering and Public Works, Letter of October 21, 2003; Re: Temporary Discharge Permit, Lot No. 6 Brownfield Dewatering and remediation, Riverside Industrial Park, Schenectady, New York, by Milton G. Mitchell, P.E., Commissioner of Public Works.

Figure 1
Sec Pocket

Treatment System Simplified Flow Schematic
Lot 6 - Riverside Technology Park
Schenectady, NY
 (not to scale)

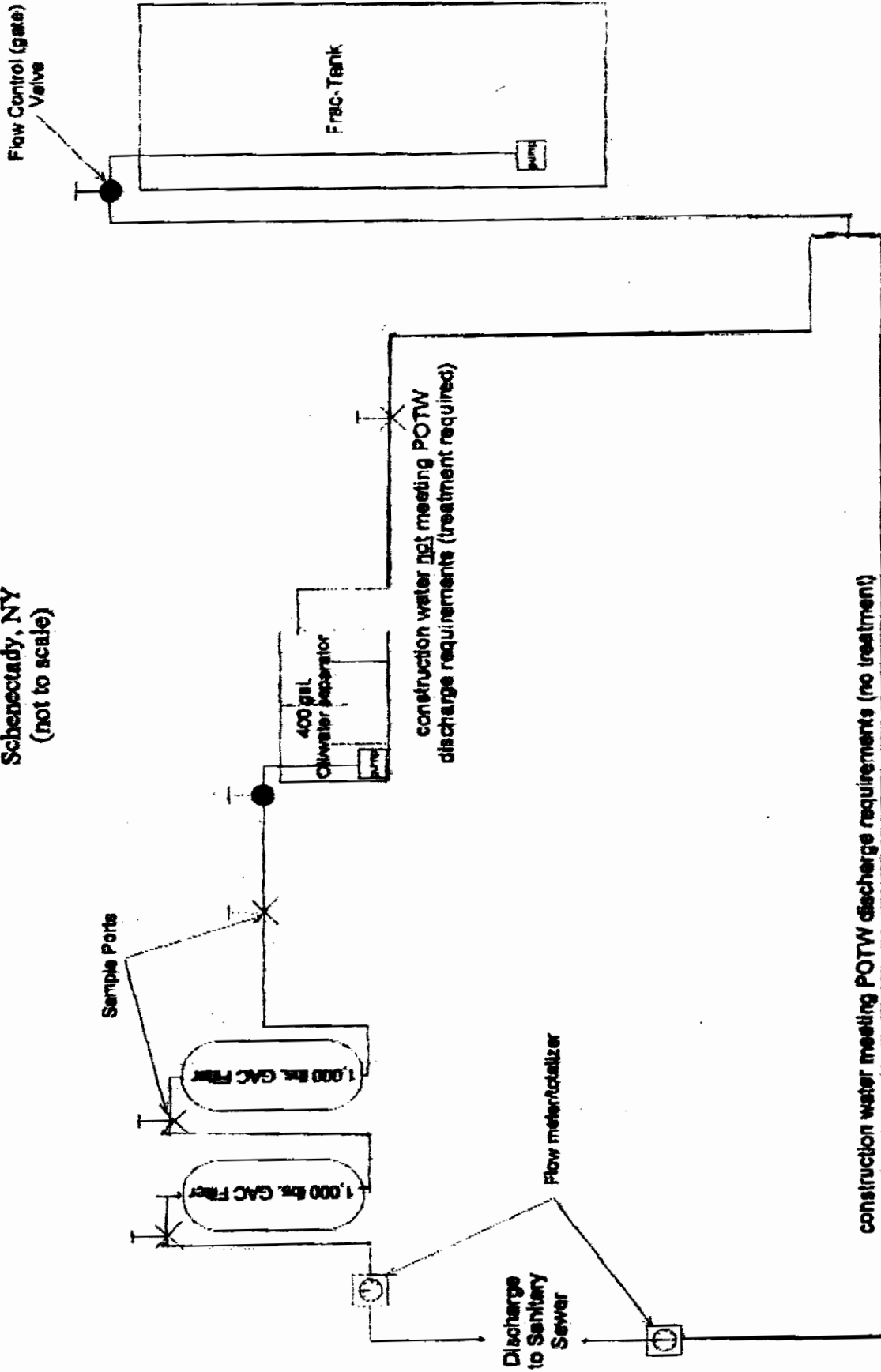
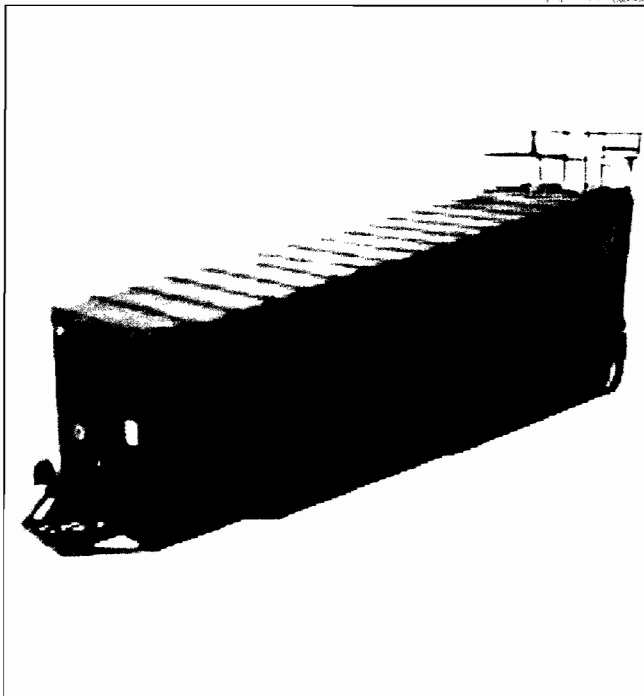
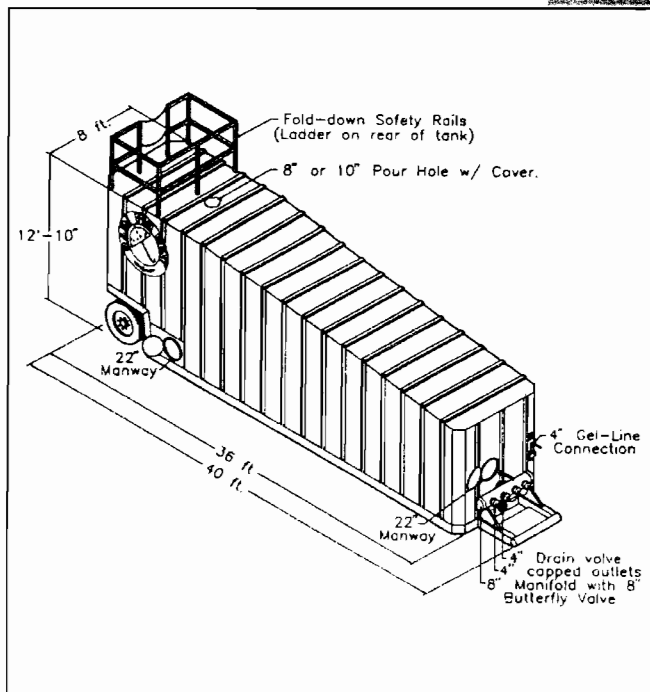


FIGURE 2

STEEL TANKS



21,000 Gallon Steel Manifold Tank



Tank Dimensions

21,000 GALLON MANIFOLD TANK EPOXY COATED OR CARBON STEEL

FEATURES

- Totally enclosed tank
- Complete guard rail system
- Cross style internal bracing
- Quick Klean "V" shaped floor
- Easy to move
- Options: vapor tight, epoxy coated interior, hammer union manifolds

TECHNICAL

WORKSAFE™ manifold steel tanks have a "V" shaped floor which allows any residual fluid in the tank to be easily drained out the floor level 4" butterfly valves. Optional internal epoxy coating offers additional chemical resistance over bare steel tanks with the added benefit of eliminating rust scale. (Chemical resistance charts are available.) The tanks are supplied with an internal liquid mixing line and an 8" outside valved manifold with four 4" outlets. The integral running gear allows for easy transport and movement of tank.

MATERIAL SPECIFICATIONS

Steel construction, totally enclosed, cross style internal bracing and optional internal two part epoxy coating. Two 4" butterfly valves located at either end of the "V" shaped floor. Permanently attached axles for maximum maneuverability. Grip strut ladder rungs and guard rail system on the roof of the tank. Positive seal hammer union on the manifold. Optional vapor recovery fitting. Two 22" vapor tight access hatches. Weight is 19,500 lbs.



RAIN FOR RENT

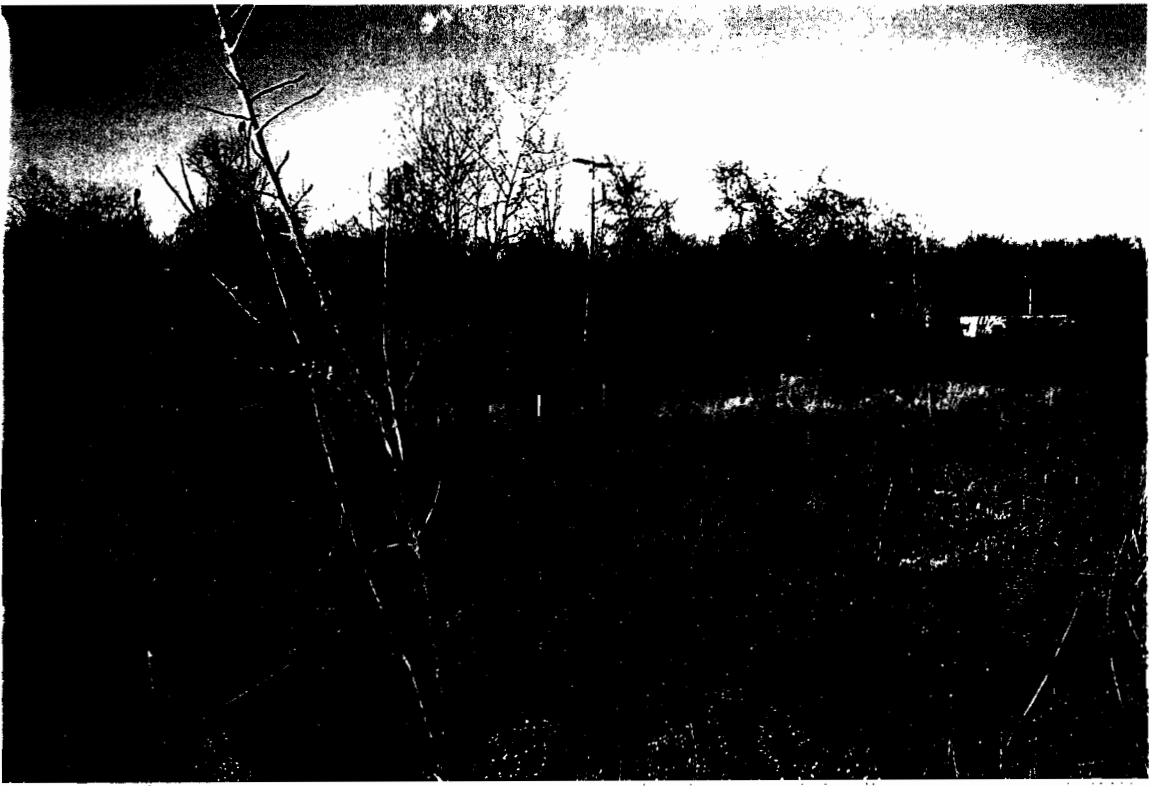
P.O. Box 2246 • Bakersfield CA 93303

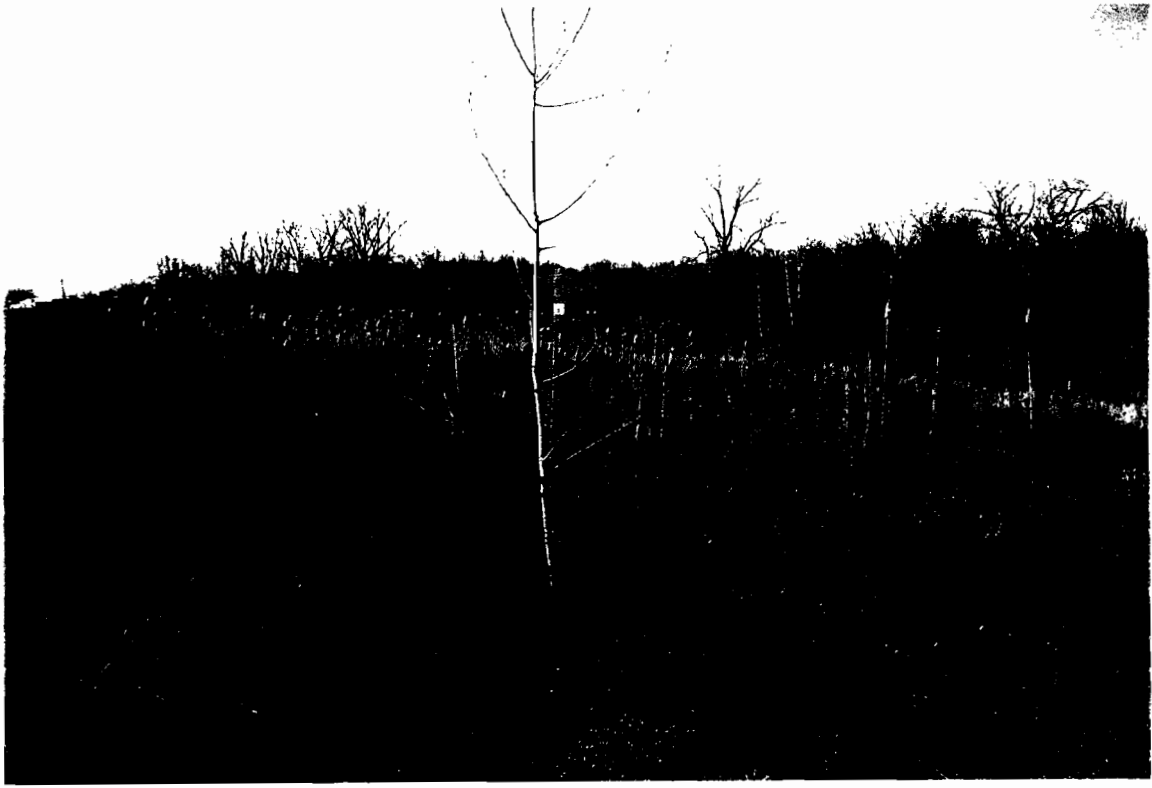
800 742-7246 • 661-399-0124 • FAX 661 393-1542

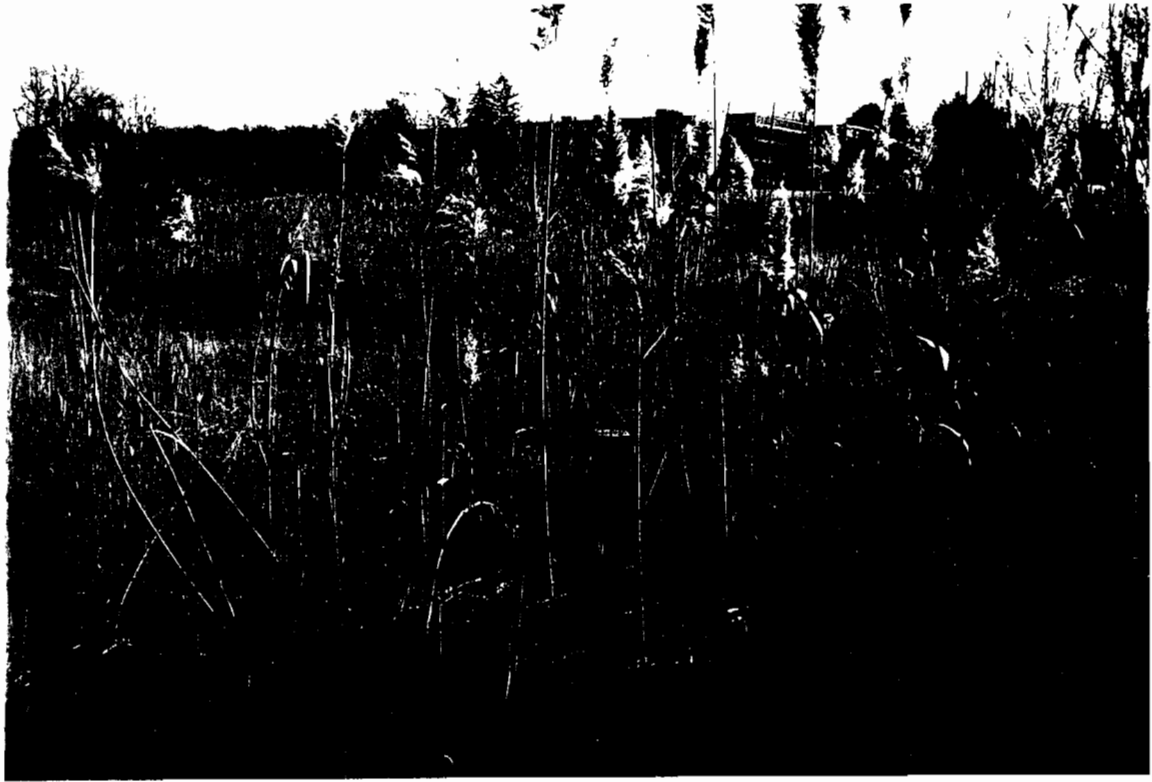
Internet: www.rainforrent.com

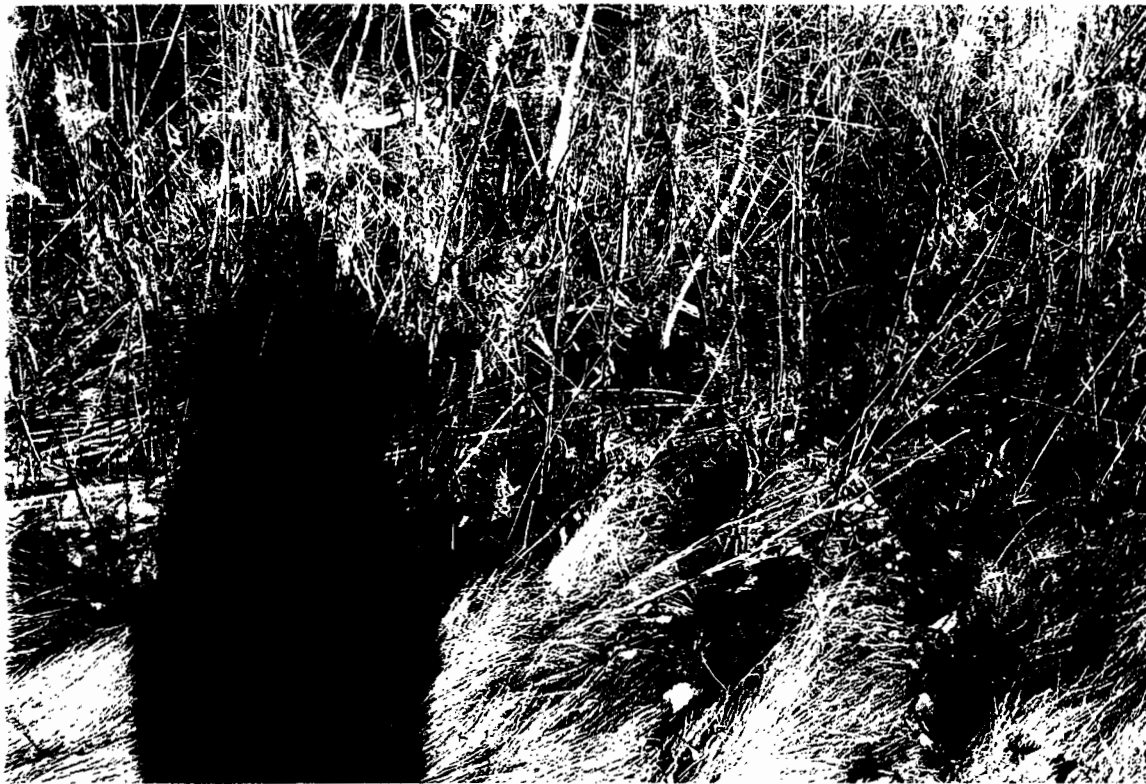
APPENDIX A

PHOTODOCUMENTATION OF CURRENT SITE CONDITIONS













APPENDIX B
REQUIRED PERMITS



**DEPARTMENT OF ENGINEERING
AND PUBLIC WORKS**

**CITY OF SCHENECTADY
NEW YORK**

ROOM 205 CITY HALL
105 JAY STREET
SCHENECTADY, NY 12305
(518) 382-3082
FAX (518) 382-1050

MILTON G. MITCHELL, PE
COMMISSIONER OF PUBLIC WORKS
G. DAVID KNOWLES, PE, LS
ASSISTANT CITY ENGINEER

October 21, 2003

Schenectady Industrial Development Agency
c/o Jeffrey R. Holt, P.E.
Holt Consulting
620 Washington Ave.
Rensselaer, New York 12144

**Re: TEMPORARY DISCHARGE PERMIT
LOT NO. 6 BROWNFIELD DEWATERING AND REMEDIATION
RIVERSIDE INDUSTRIAL PARK
SCHENECTADY, NEW YORK 12308**

Dear Mr. Holt:

We have received and reviewed your request for dewatering and treating groundwater at the above facility and to discharge treated groundwater from the treatment system to the City's Sanitary Sewer System. The City and US Filter will require schematics and PI&D drawings of the treatment system along with a site visit during initial startup prior to commencement of discharge. In accordance with City of Schenectady's Sewer Use Ordinance (SUO) we have established the following criteria for the discharge of treated groundwater from this dewatering operation:

1. There will be a \$100.00 administrative fee made payable to the City of Schenectady to discharge treated groundwater to the City's system prior to the commencement of discharge.
2. Since this dewatering operation is planned to operate for a short-term period, the City will be reimbursed \$25.00 per 1,000 gallons of wastewater discharged to the City's sewer system, as measured by a flow meter installed on the discharge line by Holt Consulting.
3. Holt Consulting will notify U.S. Filter via telephone (631-0037) at least eight hours in advance of any discharge to the City's sewer system of the treated groundwater.
4. An implementation schedule for the dewatering operation and the proposed groundwater remedial system shall be submitted to the City of Schenectady and U.S. Filter.
5. Monitoring samples should be analyzed on every FRAC tank processed and reported to Mr. Ryan L. Hendrix at U.S. Filter and Mr. G. David Knowles at the City of Schenectady via fax. Discharge water samples are to be collected at the final effluent and should be collected prior to the discharge of each FRAC tank system. The attached table identifies the monitoring requirements and frequency. Maximum allowable concentrations of the effluent wastewater will not be allowed to exceed those concentrations as shown on the attached Table.

6. Results of all analytical work, to be completed by an approved laboratory shall be submitted to the City of Schenectady and U.S. Filter as soon as possible. A final report after the dewatering is complete is required to be submitted to the City.
7. This temporary discharge permit will be valid for a period of ninety (90) days from the date of commencement of start-up for the dewatering operation.
8. The applicant will abide by and conform to the City of Schenectady's Sewer Usage Ordinance.
9. The applicant will indemnify and hold harmless the City of Schenectady, and include the City of Schenectady as additionally insured to the Contractor's Insurance Policy, and submit a copy to the City prior to commencement of work.

Should you have any questions, or require any additional information please feel free to call G. David Knowles, P.E., L.S., Assistant City Engineer at (518) 382-5199, extension 5403.

Very truly yours,


Milton G. Mitchell, P.E.

Commissioner of Public Works

MGM:ts
enclosure

cc: G. David Knowles, P.E., L.S., Assistant City Engineer
Frederick Killeen, Esq., Asst. Corporation Council
Ryan L. Hendrix, U.S. Filter

Effluent Parameter	Discharge Limitations	Units	Monitoring Frequency	Reference
Biochemical Oxygen Demand	300	mg/L	Once / FRAC Tank	COS/SUO
Total Suspended Solids	350	mg/L	Once / FRAC Tank	COS/SUO
pH	5.5 – 9.5	s.u.	Once / FRAC Tank	COS/SUO
Oil and Grease	200	mg/L	Once / FRAC Tank	COS/SUO
Arsenic	0.2	mg/L	Once / FRAC Tank	COS/SUO
Barium	4.0	mg/L	Once / FRAC Tank	COS/SUO
Cadmium	0.4	Mg/L	Once / FRAC Tank	COS/SUO
Chromium (total)	4.0	mg/L	Once / FRAC Tank	COS/SUO
Copper	0.5	mg/L	Once / FRAC Tank	COS/SUO
Cyanide (total)	0.65	mg/L	Once / FRAC Tank	COS/SUO
Lead	0.2	mg/L	Once / FRAC Tank	COS/SUO
Mercury	0.05	mg/L	Once / FRAC Tank	COS/SUO
Molybdenum	1.0	mg/L	Once / FRAC Tank	COS/SUO
Nickel	4.0	mg/L	Once / FRAC Tank	COS/SUO
Phenolic compounds (total)	4.0	mg/L	Once / FRAC Tank	COS/SUO
Polychlorinated Biphenyls (PCB)	1.0	mg/L	Once / FRAC Tank	COS/SUO
Selenium	1.0	mg/L	Once / FRAC Tank	COS/SUO
Zinc	2.0	mg/L	Once / FRAC Tank	COS/SUO
Bis(2-Ethylhexyl)phthalate	8.0	mg/L	Once / FRAC Tank	COS/SUO
Total Toxic Organics	2.13	mg/L	Once / FRAC Tank	COS/SUO
Benzene	100	µg/L	Once / FRAC Tank	NYSDEC/DOW
Ethylbenzene	100	µg/L	Once / FRAC Tank	NYSDEC/DOW
Sum of Xylenes	100	µg/L	Once / FRAC Tank	NYSDEC/DOW
Toluene	100	µg/L	Once / FRAC Tank	NYSDEC/DOW
1,3,5-trimethylbenzene	100	µg/L	Once / FRAC Tank	NYSDEC/DOW
1,2,4-trimethylbenzene	100	µg/L	Once / FRAC Tank	NYSDEC/DOW
Cis 1,2-Dichloroethene	100	µg/L	Once / FRAC Tank	NYSDEC/DOW
1,1,1-Trichloroethene	100	µg/L	Once / FRAC Tank	NYSDEC/DOW
Trichloroethene	100	µg/L	Once / FRAC Tank	NYSDEC/DOW
Trichlorofluoromethane	100	µg/L	Once / FRAC Tank	NYSDEC/DOW
Methylene chloride	100	µg/L	Once / FRAC Tank	NYSDEC/DOW
Napthalene	100	µg/L	Once / FRAC Tank	NYSDEC/DOW
Pentachlorophenol	100	µg/L	Once / FRAC Tank	NYSDEC/DOW

APPENDIX C
MATERIALS HANDLING PLAN

MATERIAL HANDLING PLAN

1.1 INVESTIGATION DERIVED WASTE

The Riverside remediation project is expected to generate petroleum contaminated water, petroleum contaminated soils and material associated with decontamination of equipment and personnel. None of these wastes are expected to be hazardous as defined by the Resource Conservation and Recovery Act of 1976 (RCRA) or regulated under the Toxic Substances Control Act of 1976.

Sanitary wastes generated during this project will include paper, cardboard, plastics, personal protective equipment, etc. This waste will be collected in plastic bags as it is generated and taken for disposal on an as-needed basis.

Petroleum contaminated soil and water will be generated during, sampling, excavation and equipment decontamination activities. These soils will be put stored on site in a staging area pending waste characterization. Water will be stored in vacuum trucks and frac tanks and treated through the on site water treatment system (see Figure 2). PPE and other site derived materials will be drummed and properly labeled to describe their contents and provide emergency contact information. (Empty drums will be labeled as such and stored upside down or on their side.) Once waste characterization has been completed, appropriate transportation/ disposal documentation will be prepared and the waste transported to a properly licensed disposal facility by Valley Equipment Company (VEC), a licensed waste disposal hauler. Upon final disposal of the waste, the VEC will provide a letter to the Engineer and NYSDEC certifying the quantity of waste taken as well as the final disposition of the waste. A copy will be retained for project records.

2.0 INVESTIGATION-DERIVED WASTE MANAGEMENT

2.1 MANAGEMENT OF SOIL STOCKPILES

The only investigation-derived waste (IDW) that will be generated by site operations is petroleum contaminated soil that is being excavated from two designated Areas, A and B, and water/liquids from the dewatering process and from decontamination and spent PPE. The Work Plan-Site Plan (Figure 1) identifies appropriate areas that will be used to stockpile excavated soils awaiting transport and disposal at the Albany Country Landfill and locations of the on-site frac tanks and water treatment system.

The entire site encompasses approximately 2.44 acres and will be surrounded by a 5-foot high fence. Access will be through a locked gate. The entire footprint of the staging area where excavated soils will be temporarily stockpiled will be lined with 40 mil plastic. Erosion control measures will be implemented as appropriate

to prevent runoff from the pad and the piles will be covered to prevent aeolian transport. On site supervisor will manage the stockpiles by keeping track of incoming and outgoing loads, maintain good housekeeping, maintain the soil cover tarps, and assuring that the stockpiles are secured from the public.

The on site supervisor and the truck drivers hauling excavated soils to the stockpile will document the quantity (in cubic yards) of soil excavated each day. The on-site supervisor will track the required information on the soils as stated in Section 02507 of the Design Report and create a paper trail to its final disposition at the City of Albany Landfill. A form entitled Waste Inventory Form will be used track the quantity of soil excavated from each Area through its final location in the landfill. Appendix E contains a copy of that form.

Before stockpiling of soils commence pre-construction samples will be taken in accordance to the procedures outlined in the Sampling and Analysis Plan (SAP). Samples will also be collected after the staging area has been demobilized for comparative purposes.

Spent PPE will be double-bagged and accumulated in a dumpster at the site for eventual disposal at the City of Albany Landfill.

2.2 EQUIPMENT DECONTAMINATION

A decon pad will be established at the site and equipment will be pressure-washed. Details of contamination procedures are shown in the Health and Safety Plan. The Work Plan-Site Plan shows the location of the decon pad. A decon station and truck wash will be 70 ft X 12 ft over a 6" concrete slab and will be on grade with a 2 ft. X2 ft. X4 ft. catch basin to collect water/liquids. All liquids will be sent through the dewatering station via a vacuum truck. Stone (#3) will be utilized as a method of keeping soils from migrating to non-contaminated areas. Water/liquids and soils from the decontamination activity will be sampled and analyzed in accordance to the procedures outline in the SAP. Water/liquids not meeting the clean up standards will be processed through the on site water treatment system. Any soils not meeting the clean up standards will be stockpiled for final disposition at the City of Albany Landfill.

2.3 EXCAVATED MATERIALS

Excavated materials will be stocked piled in designated staging areas as specified in Section 3.5 of the Work Plan and Section 02504 of the Design Report. Waste characterization of samples will be performed as specified in the SAP

2.4 WASTE TRANSPORTER

Transportation of contaminated soils will be provided by Valley Equipment Company (VEC), who is a licensed and insured hauler/transporter. The following information is provided as required by Section 02504 of the Design Report:

Contact Information:

Valley Equipment Company
16 Wilber Ave.
Schenectady, NY12304
518-374-6755
Contact Person: WILLIAM BLACK

EPA ID #: NYSDEC # 4A-515
Equipment to be used:
Four 20 Ton Capacity Triaxles and
Two 30 Ton Capacity Dump Trailer (Tractor Trailer)

Transportation of contaminated soils will be by the equipment listed above Valley Equipment Co. is permitted to carry contaminated dirt, soils or sand by permit Numbers-N816 and 4A-515. Any free-liquids encountered in the excavated soils will be removed by utilizing lime as an additive to absorb the free liquids.

Valley Equipment Company has previous experience in performing this type of waste hauling. VEC has been on the NYSDEC Spill Response Contract since 1994 handling similar waste and has been permitted to handle this type of waste for the same period of time.

Accident prevention will be accomplished by conducting daily tool box (or "tail gate") meetings along with discussions of near misses and accident prevention at annual 8 hour refresher training courses. Safe driving and liability are also discussed at length at both the daily meetings and the refresher course.

2.5 DISPOSAL FACILITY

Contaminated soils will be taken to City of Albany Landfill, which is a licensed disposal facility. The following information is provided about the disposal facility:

Contact Information:

City of Albany Solid Waste Management Facility
525 Rapp Rd.
Albany, NY 12205
(518) 869-3651
Contact Person: Kelly Dwyer

2.6 RECORD KEEPING

VEC will keep detailed records regarding all material handling during restoration and remediation of this site. Manifest forms will be completed as required by 6 NYCRR Part 372 and other appropriate agencies. All forms will be completed as specified in 3.2 Sub-part F of Section 02507 of the Design Report. Appendix E contains some of the record keeping forms.

APPENDIX D

CONSTRUCTION SCHEDULE AND EQUIPMENT

Date:

Project Number:

Schenectady

[illegible][illegible]

EQUIPMENT LIST

16 ft box truck with two 1000# high pressure carbon units with a 500gallon oil water separator (fully automated)

A tractor trailer size construction trailer with a 200 amp electrical service with electric heat—XP

Portable generator 50KW diesel powered

4 ---D model tri--axle Mack trucks with 20 Ton Capacity (R permit for weight),

2 ----28 ft, 30 Ton tri-axle dump trailers (tractor trailers) 35 cubic yard

1---3500 gallon vac truck

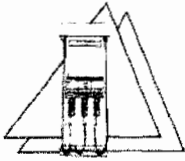
1---750 gallon vac truck

Assortment of water pumps and hoses

Variety of excavation/earthmoving equipment

APPENDIX E

FORMS



VALLEY EQUIPMENT CO., INC.
16 Wilber Avenue
Schenectady, New York 12304

(518) 374-6755
FAX: (518) 374-1599

LETTER OF TRANSMITTAL

Date:	JOB NO.
ATTN:	
RE:	

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:
☐ Shop Drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO.	DESCRIPTION

THESE ARE TRANSMITTED as checked below:

- | | | |
|--|---|--|
| <input type="checkbox"/> For approval | <input type="checkbox"/> Approved as submitted | <input type="checkbox"/> Resubmit__copies for approval |
| <input type="checkbox"/> For your use | <input type="checkbox"/> Approved as noted | <input type="checkbox"/> Submit__copies for distribution |
| <input type="checkbox"/> As requested | <input type="checkbox"/> Returned for corrections | <input type="checkbox"/> Return__corrected prints |
| <input type="checkbox"/> For review and comment | | |
| <input type="checkbox"/> FOR BIDS DUE _____ 20__ <input type="checkbox"/> PRINTS RETURNED AFTER LOAN TO US | | |

REMARKS:

COPY TO:

SIGNED:

CHANGE ORDER

Page #1 of 2

VALLEY EQUIPMENT COMPANY

16 Wilber Avenue

SCHENECTADY, NEW YORK 12304

(518) 374-6755

(518) 374-1599

Number _____

PHONE	DATE
JOB NAME/LOCATION	
JOB NUMBER	JOB PHONE
EXISTING CONTRACT NO.	DATE OF EXISTING CONTRACT

TO _____

We hereby agree to make the change(s) specified below:

NOTE: This Change Order becomes part of and in conformance with the existing contract.

WE HEREBY AGREE to make the change(s) specified above at this price --->

\$

DATE

December 23, 2004

PREVIOUS CONTRACT AMOUNT

\$

See above

AUTHORIZED SIGNATURE (CONTRACTOR)

REVISED CONTRACT TOTAL

\$

#VALUE!

Accepted -- the above prices and specifications of this Change Order are satisfactory and are hereby accepted. All work to be performed under same terms and conditions as specified in original contract unless

Signature: _____
(OWNER)

Project Name:

Page ____ of ____

Project Name:

Project No.:

Activities:

[illegible]

SITE SAFETY AND HEALTH PLAN ACKNOWLEDGMENT

I understand and agree to abide by the provisions as detailed in this Site Safety and Health Plan. Failure to comply with these provisions may lead to disciplinary action that may include dismissal from the work site, termination of employment or, for subcontractors, termination of the work contract.

Printed NameCompany

Signature

DateThis image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SITE SAFETY BRIEFING FORM

Project _____ Location _____
Date _____ Time _____
Type of Work _____

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment _____

Chemical Hazards _____

Physical Hazards _____

Biological Hazards _____

Emergency Procedures Refer to Site Safety and Health Plan _____

Hospital/Clinic _____ Phone _____

Hospital Address _____

Special Equipment _____

Other _____

ATTENDEES

Name (Printed)

Signature

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Meeting Conducted by: _____

Site Safety Officer: _____

DAILY FIELD LOG

Name/Initials:	Date:
Start Time:	Project Name:
Stop Time:	Project Location:
Work Performed (e.g. Sites visited, maintenance performed, locations Sampled, etc):	
Deviations from Schedule:	
Deviations from Approved Plans/Procedures:	
Names of Field Crew (C) / Visitors (V): Check name or write in name(s):	
Problems Encountered:	
Comments / Miscellaneous:	

SAFETY INSPECTION REPORT

Date: _____ Start Time: _____ Complete Time: _____

Project Name: _____ Project No: _____

Program Manager: _____ Project Manager: _____

Project Description: _____

Site Activities At Time Of Inspection: _____

ITEM ONE

Interviewed Employee: _____

Safety Issue: _____

Corrective Action: _____

Assigned To: _____ Follow-Up Date: _____

Correction Verified By: _____ Date: _____

ITEM TWO

Interviewed Employee: _____

Safety Issue: _____

Corrective Action: _____

Assigned To: _____ Follow-Up Date: _____

Correction Verified By: _____ Date: _____

Inspection Completed By: _____ Date: _____

Health And Safety Review By: _____ Date: _____

SAFETY INSPECTION REPORT (Continued)

Item Number: _____ Safety Contact Employee (Name): _____

Safety Issue: _____

Corrective Action: _____

Assigned To: _____ Follow-Up Date: _____

Correction Verified: _____ Date: _____

Item Number: _____ Safety Contact Employee (Name): _____

Safety Issue: _____

Corrective Action: _____

Assigned To: _____ Follow-Up Date: _____

Correction Verified: _____ Date: _____

Item Number: _____ Safety Contact Employee (Name): _____

Safety Issue: _____

Corrective Action: _____

Assigned To: _____ Follow-Up Date: _____

Correction Verified By: _____ Date: _____

SAFETY INSPECTION REPORT CHECKLIST

	Not Applicable	Not* Acceptable	Acceptable		Not Applicable	Not* Acceptable	Acceptable
HEALTH AND SAFETY DOCUMENTATION				SITE CONTROL			
Tailgate Safety Meeting				Security Maintained			
Hot Work Permit				Clearly Marked Exclusion Zone			
Confined Space Entry Permit				Clearly Marked Contamination Reduction Zone			
Hospital Route Map				Clearly Marked Support Zone			
OSHA 200 Log				Sign In/Out Log			
MSDS				Decontamination Procedures			
Air Monitoring Logs				Client Specific Passes			
Equipment Calibration Logs				PERSONAL PROTECTIVE EQUIPMENT			
Personnel Training Records				Hard Hats			
Personnel Medical Records				Safety Glasses			
Accident Forms				Steel-Toed Boots			
Emergency Phone Numbers				Gloves			
OSHA Job Protection Posters				Hearing Protection			
HGL H&S Program Manual				Traffic Vests			
Client Specific Documentation				Face Shields			
H&S Plan Acknowledgement				Chemical Resistant Coveralls			
				Chemical Resistant Gloves			
EMERGENCY EQUIPMENT				Respiratory Protection			
Fire Extinguishers				Back Support Devices			
Shower/Eyewash				Chaps			
Alarm System				Lifelines/Harness			
Transport Vehicle				Welder's Hood w/ Hard Hat			
Communication System				Welders Sleeves/Leathers			
First-Aid/CPR Provider				Personal Flotation Device			
				FALL PROTECTION			
				Fall Protection Used When Over 6 Feet Above Ground			
				Full Body Harness and Lanyard Used			

*Any "Not Acceptable" response must be documented on the corrective action form.

SAFETY INSPECTION REPORT CHECKLIST (Continued)

	Not Applicable	Not* Acceptable	Acceptable		Not Applicable	Not* Acceptable	Acceptable
HOUSEKEEPING AND SANITATION				ELECTIRCAL			
Adequate Illumination				GFCIs in Place			
Drinking Water/Disposable Cups				Lockout/Tagout Procedures			
Sanitary Facilities				Equipment UL Listed or FM Approved			
Break Area				Adequate Clearance from Overhead Lines			
General Housekeeping				Grounding and Bonding			
Walkways Clear				Qualified Electricians			
VEHICLE/EQUIPMENT OPERATIONS				HAND TOOLS			
Record of Regular Inspection and Maintenance				Un-compromised Insulation			
Back-up Alarm				Utility Markouts Completed			
Qualified Operators				Correct Tool Being Used for Job			
Proof of Insurance				Damaged Tools Repaired or Replaced			
Wheels chocked				All Guards in Place			
Brake Lights, Warning Devices Operative				Neat Storage, Safe Carrying			
Weight Limits and Load Sizes Controlled				Grounded 3-Prong Plugs			
DOT Requirements Met				LADDERS			
Fire Extinguisher				Regular Inspections			
All Glass in Good Condition				Secured at Top and Bottom			
SITE MONITORING				LADDERS			
				Side Rails Extend 3 Feet Above Top of Landing			
Volatile Organics				Wooden Ladders Not Painted			
Dust				Step Ladders Fully Opened When In Use			
Noise				Safety Feet in Use			
Radiation				Rungs Not Over 1 Foot on Center			
Illumination				Ladder Training			
Semi Volatile Organics				Top of Step Ladder Not Used as Step			
Inorganic							

*Any "Not Acceptable" response must be documented on the corrective action form.

SAFETY INSPECTION REPORT CHECKLIST CORRECTIVE ACTIONS

[illegible]

SAFETY INSPECTION CHECKLIST FOR HEAVY EQUIPMENT

INSTRUCTIONS: To be completed by Contractor in accordance with Contract Requirements.

For Cranes, Shovels, Derricks, Draglines, Cranes equipped with Pile Drivers, Pavers, Scrapers, Graders, Pans, Loaders, Dump Trucks, and similar heavy equipment.

CONTRACTOR:	CONTRACT NO.:
Type of Equipment:	Equipment No.:
Date of Inspection:	
Type of Inspection: / / INITIAL / / ANNUAL / / CRITICAL LIFT OR OPERATION	
Inspected by (Signature):	Approved by:

ITEM	Y	N	N/A
Is notice of minimum required clearance for high-voltage lines posted at operator's position when operations are adjacent to overhead lines?			
Are belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains or other reciprocating or rotating parts adequately guarded?			
Are fuel tanks located so that spills or overflows will not come in contact with engine, exhaust or electrical equipment?			
Are all hot surfaces exposed to accidental contact suitably guarded or insulated to prevent injury or fire?			
Are exhausts and discharges so directed as not to endanger workmen or obstruct view of operator?			
Are platforms, catwalks, steps, handholds and guardrails provided to assure safe footing and access ways?			
Is adequate protection for operator provided against elements, falling or flying objects, swinging loads, backlash of winch cables, and similar hazards?			
For those pieces of equipment listed as requiring rollover protection: is there a certificate or permanently affixed information from either the (a) manufacturer of piece of equipment; (b) manufacturer of rollover protection; or (c) registered professional engineer, attesting that both rollover protection as well as method of attachment satisfy rollover protection requirements?			
If equipment is to be operated on highways, is it equipped with turn signals?			
Are positive stops or limiting devices provided for equipment operated on rails?			
Is barricade provided where there is danger to persons from swing radius of rotating superstructure of crane to prevent injury?			
Is all heavy-duty haulage equipment equipped with operable emergency braking system which will automatically stop Equipment upon failure in service brake system?			
Is safe-load capacity chart determined by performance test, recommended operating speeds, and special hazards posted in cab of crane?			
Do all points requiring lubrication during operation have such fittings located or guarded in such manner that personnel servicing equipment are protected from injury?			
Do all modifications, extensions, replacement parts, and/or repairs to equipment maintain same factor of safety as originally manufactured equipment?			
Does visual inspection reveal any structural members bent or rusted, or do they otherwise show signs of damage?			
Are all load drums on load hoisting equipment equipped with cogs, pawls, or other positive locking devices?			
Is there sufficient cable to allow two full wraps of cable on drums at all working positions?			
Is hoist-braking equipment capable of stopping, lowering, and holding load of at least full test load?			
Are traveling rail-mounted gantry cranes (except floor-operated type) equipped with warning device, which will sound continuously when crane is traveling?			
Are all hose connections to pile driver hammers, pile ejectors, and jet pipes equipped with a safety lashing?			

ITEM	Y	N	N/A
Are the hanging or swinging pile driving leads equipped with a fixed ladder?			
Are fixed pile driver leads equipped with decked landings having guardrails, intermediate rails, and toe boards? Are the fixed leads provided with a fixed ladder or stairs for access to landings and head blocks?			
Are pile driver leads equipped with stop block to prevent hammer from being raised against head block?			
Are fixed ladders more than 20 feet in height on pile driving leads provided with ladder climbing devices?			
Are adequate guardrails provided around the skips of pavers, concrete mixers, and similar equipment? Guards required for open end of skip?			
Are all motor vehicles equipped as follows: a. Directional signal lights both front and rear? b. Two headlights: one on each side: one red taillight and one red or amber stoplight for operation between sunset and sunrise when applicable?			
Is service or maintenance equipment, which will be parked or moving slower than normal traffic on haul roads and/or at night, equipped with a flashing yellow light mounted to be visible from all directions?			
Are truck and crawler-mounted cranes mounted on barges securely attached to the barge: or are control barriers provided to prevent equipment from running off barge where barge stability is such as to permit limited travel?			
Are brakes on wheeled equipment in good operating condition?			
Are windshields on equipment provided with windshield wipers in proper operating condition?			
Is all glass installed in cabs and bodies of vehicles and equipment "safety glass"?			
Are trucks and similar equipment equipped with speedometers in working condition?			
Are running boards and steps of vehicles provided with non-slip surfaces?			
Are dump bodies provided with hinged struts or other suitable devices for locking body in raised position?			
Are tailgate dumping devices so arranged that operator will be in the clear while dumping load?			
Is engine equipped with power-operated starting device in operative condition?			
Is air pressure gauge in operative condition on equipment with air brakes?			
Is air tank equipped with drain valve in an accessible position?			
Are towing devices structurally adequate and properly mounted?			
If equipment is to operate on airfield landing areas, it is equipped with proper flags of proper size and color?			
Are cables for electrically powered equipment in good condition and are insulated hot sticks available for handling cables?			
Is all self-propelled construction equipment except light service trucks, panels, pickups, station wagons, and crawler-type cranes, power shovels, backhoes, and draglines equipped with a reverse signal alarm which will operate automatically when vehicle moves in reverse and will give suitable audible sound alarm at certain intervals for the conditions and circumstances under which the equipment is operated?			
Construction equipment equipped with rollover protection shall also have installed a safety belt for the operator.			
Are operators able to read and understand signs, notices, operating instructions, and signal code to be used? a. Does operator have any known physical or mental condition, which would be detrimental to safe operation of equipment? b. Is operator's vision and hearing good?			
Has all broken or cracked glass been replaced?			
REMARKS (Enter Action Taken)			

APPENDIX F
PROJECT PERSONNEL

KEY SITE PERSONNEL and RESUMES

Health & Safety Officer(s) - Bill Toran and Bill Black

On Site Supervisor - Russell Carter

QA Officer - Russell Carter

Sampling personnel - Bill Toran, Russell Carter, Jack Felter and Jim Kyme

List of other on site personnel

Edward Labadia

Fred Freeman

Sean Cline

Michael Carney

Glenn Berry

Robert Leduke

WILLIAM A. TORAN
Senior Environmental Geologist

Education: BS - Geology, State University of New York at Cortland,
1986

Professional Affiliations: National Ground Water Association (Association of
Groundwater
Scientists and Engineers)
Hudson-Mohawk Professional Geologists' Association

Experience: 1998 to Present, Valley Equipment Company, Inc.
1997-1998, Passaretti Geological & Environmental
Consultants
1993-1997, Precision Environmental Services, Inc.
1991-1993, American Spill Abatement, Inc.
1989-1991, Dunn Geoscience Corporation
1986-1989, Groundwater Technology, Inc.

Bill Toran is a Senior Environmental Geologist with Valley Equipment Company, Inc.'s environmental services division. Bill is responsible for site investigations and remediation projects that involve adverse chemical releases to the subsurface which impact soil and ground water. Project management skills include: report and proposal development, project budgeting and cost analysis, and interaction with regulatory agencies, clients, contractors, and the public. Responsibilities include: the planning, organization and completion of subsurface investigations and the design, installation, monitoring, and maintenance of remedial systems. Remedial experience includes: the treatment of free phase, dissolved phase, and adsorbed contamination in the subsurface. Bill's knowledge of the field stems from a continuing education combined with thirteen years of hands-on experience. Bill is well versed in Federal and State tank closure regulations. Bill has performed environmental services for several major oil companies and other Fortune 500 companies as well as small independently owned businesses.

As a project manager, Bill uses existing information about a site to implement appropriate investigations and follow through with work plans that are economically feasible, beneficial for the client and acceptable to the regulators. By working with clients and regulators, environmental goals can frequently be achieved by the use of various investigative or remedial techniques. The ability to recognize the application of different environmental solutions to varying site specifics results from experience. With thirteen years experience, Bill can match the appropriate work scope with the conditions encountered at the site.

Specific remedial design/implementation includes:

- in situ and ex situ soil ventilation,
- air sparging
- total fluid extraction
- product recovery
- large scale soil excavation, disposal, treatment and recycling
- water table depression/plume stabilization

JAMES M. KYME
Environmental Technician

Education: High School Diploma, South Colonie Central High School
Lab Safety Course, Ulster Community College.
OSHA 40 hour Hazwoper certified.
OSHA 8 hour refresher course.
24 hour Industrial hygiene air monitoring certificate.
Hazardous materials transportation certificate.
DOT / EPA regulations certificate.

Experience: 2002 to Present, Valley Equipment Company, Inc.
1987-1993, Ogden Industrial Services.

James Kyme is an Environmental Technician with Valley Equipment Company, Inc's environmental services division. James's knowledge of field work and procedures stems from continuing education combined with 8 years of hands on experience.

James's experience and responsibilities include:

- Installation, gauging and sampling of monitoring wells.
- Soil, water and air sample collection.
- Spill response and cleanup.
- Field measurements and documentation.
- Construction, monitoring, operation and maintenance of remedial systems.
- Operation and maintenance of various environmental equipment (vacuum-truck, Geo-probe, pumps, etc.).
- Operation, calibration and maintenance environmental instruments and field equipment.
- Environmental material and supply inventory control.
- Knowledge of liquid and solid waste manifest, transport and disposal procedures.

**JACK FELTER
ENVIRONMENTAL SPECIALIST**

EDUCATION: High School Diploma - Pittsfield High School
Graduate - General Electric Apprentice
Manufacturing Technician (4 yrs)
Graduate - General Electric Manufacturing
Studies Program (4 yrs)
OSHA - 40 Hr. Hazwoper Certified
OSHA - 8 Hr. refresher course
New York State Certified First Responder

EXPERIENCE: 1998 to Present - Valley Equipment Co
1996 - 1998 - Lebanon Valley Landscaping
1988 - 1993 - General Electric Naval Ordnance Systems

Jack Felter is employed as an Environmental Specialist with Valley Equipment Co., in the environmental services division. Jack's knowledge of field work and procedures comes from 6 years of experience

Jack's experience and responsibilities include:

- *Direct leadership over environmental crew involved in Petroleum Tank removals and associated contaminated soil and liquid removal.
- *Project planning and estimating of Petroleum Tank Removals.
- *Installation, gauging and sampling of monitoring wells.
- *Soil and water sample collection.
- *Spill response and cleanup.
- *Field measurements and documentation
- *Construction, monitoring, operation and maintenance of remedial systems
- *Operation and maintenance of Geo-Probe and pumping operations.

***Operation, calibration and maintenance of environmental instruments and field equipment.**

***Knowledge of liquid and solid waste transport and disposal procedures**

Mr. William H. Black
28 Birch Hill Drive,
New Lebanon, New York 12125
518-766-5826

Experience

1978 thru 1983	Lar-A-Bowl Lanes Inc. New Lebanon, NY 12125	General manager-All operations & facilities
1983 Thru 1985	Lebanon Valley Landscaping, Inc 1746 Route 20, New Lebanon, NY	Owner- Start up operations of Small Excavation firm
1985 Thru 1998	Lebanon Valley Environmental Health & Safety 1746 US Route 20 New Lebanon, NY 12125	President and Chief operating officer of environmental firm which handles Abatement, remediation, characterization & disposal of Hazardous waste.
1998 thru Present	Valley Equipment Company, Inc 16 Wilber Ave, Schenectady, NY 12304	Vice-President in charge of Abatement, Remediation, characterization & disposal of Hazardous Waste . and General Construction.

Education

Hudson Valley Community College
Troy, New York

**Degree in banking, Insurance, and Real
Estate .
Business Management**

Professional affiliations

Columbia County Office of Emergency Management
610 State Street,
Hudson, New York 12534

9/01 thru 2/03—Deputy Director responsible for Emergency Planning Public School Evacuations and Emergency plans-- Liaison to Columbia County Hazardous Material Response Team.

2/03 thru Present—Director of Columbia County Emergency Management,

Columbia County Bureau of Fire
610 State Street
Hudson, New York 12534

1998 thru present--- MEMBER of **Columbia County Hazardous Material Response Team**, team performs Confined space entry, Chemical, Biological, Radiological and WMD response to Columbia and Greene Counties.

**New York State
Department of State
Office of Fire prevention and Control
Training Academy**

Emergency Control of Hazardous material Incident I	16 Hours
Emergency Control of Hazardous material Incident II	24 Hours
Hazardous Materials Incident Command	24 Hours
Pesticides, Poisons , Challenges for responders	12 Hours
WMD-Emergency Response to Terrorism-Tactical	
Considerations for Hazardous Materials Incidents	16 Hours
Hazardous Material seminars	8 Hours
Hazardous Materials seminars	8 Hours
Firefighting Essentials	39 Hours
Initial fire attack	18 Hours
Accident Victim Extrication	32 Hours
Preparing for Command	24 Hours
Pump Operators	18 Hours
Hazardous Materials- technician	12 Hours

**Northern Health & Safety Services
Lake Luzerne, NY**

Hazardous Waste Operations and Emergency Response	
Osha 29 CFR 1910.120	40 Hours
Refreshers	8 Hours
Refreshers	8 Hours
Refreshers	8 Hours
Refreshers	8 Hours
Refreshers	8 Hours

Volunteer Services

**Lebanon Valley Protective Association
PO Box 162
New Lebanon, NY 12125**

Fire, Rescue and Emergency services

29 Year member
5 Years as a line officer
5 years—Assistant Chief
5 years—Chief Officer
Currently – Chief Officer

Russell B. Carter
407 Antler Ct.
Ballston Spa, NY 12020
(518) 885-9656

SUMMARY:

Experience in marketing/managing all aspects of power distribution including industrial, commercial and residential electrical projects. Areas of expertise include sales, contract negotiations, bid and proposal preparation, estimating, design build, troubleshooting and project/personnel management. Accomplishments include development and expansion of commercial sales for a large electrical contractor in Washington DC area. Highly skilled in innovative management of multiple commercial projects. Key qualifications include being self motivated with strong analytical and critical thinking skills, and having exceptional leadership abilities focusing on using motivational skills to promote effective team work.

PROFESSIONAL EXPERIENCE:

Independent Contractor, Albany, NY

2003–present

For Valley Equipment Company project manager for the Riverside Lot. 6 Brownfield Restoration Project. Duties include preparation of all work plans; coordination between engineer, contractors and subs; and overall project organization and over site. Laboratory technician working for BBL Environmental under contract to GE on the Hudson River sediment sampling initiative. Specific duties include preparing and processing river core samples for PCB analyses. Purpose of this on- going study is to identify and map the areas of highest concentrations of PCB's on the river bottom.

As a resident engineer for Iyer Environmental Group, provided operation, maintenance and monitoring (O M & M) services at various closed landfill projects for NYSDEC. Responsibilities at the Kingsbury Landfill, Hudson Falls, NY included sampling, testing, repairing, upgrading, operating and maintaining the leachate treatment system. Performed routine O M & M activities at several landfills in Dutchess and Putnam Counties with duties consisting of evaluating, repairing and upgrading landfill gas collection and flare combustion systems; preparing inspection reports; taking water levels; collecting ground water and sediment samples and running leachate treatment systems.

Kolb Electric Inc., Washington, DC

1999-2003

Employed by one of the largest full service electrical contractors in the Metropolitan DC area. Kolb Electric, established in 1925, specializes in residential and commercial service. Duties at Kolb included residential and commercial estimating, project management, plan review of bid submissions, design build for projects requiring engineering, sales and labor management, and contract negotiations. Since 2000 responsibilities have included developing the commercial business for Kolb in addition to overall responsibility for commercial projects with budgets ranging up to \$750,000. Effective organizational and project management skills have helped increase profit margins and maintain overall employer and customer satisfaction.

Floyd E Davis Co., Washington, DC

1999-2003

Floyd E Davis Co is a property management company operating in the Metropolitan DC area. I held a part time position while in residence as a maintenance man. Duties included apartment building maintenance of electrical, HVAC, plumbing, carpentry, painting, grounds, snow removal, and cleaning.

C & C Electrical Services, Inc., Rockville, MD

1993-1999

C & C Electrical Services is a small full service electrical contractor specializing in commercial and residential projects up to \$275,000. Started with C & C Electric as an Assistant Manager. Attained the position of Vice President in 1995. Overall responsibilities included estimating, personnel and project management.

Virginia Power Dominion Power (Formerly VIRGINIA Electric and Power Co.)

1977-1993

Lineman Development Program 1978-1983. Areas of expertise include construction and maintenance of electrical distribution including transmission, substation maintenance, switching overhead & underground distribution, and trouble shooting of all of the above mentioned electrical systems. Experience with various types of heavy equipment including auger and bucket (aerial) trucks. Awarded Electric Serviceman First Class in 1984. In 1991 assigned to two year position as Assistant Operations Supervisor with responsibilities for overall operations, writing switching orders for the maintenance and relocation of distribution facilities, monitoring substation and distribution facilities through SCADA (computer program) including storm maintenance and power restoration.

EDUCATION AND PROFESSIONAL ACHIEVEMENTS:

- Proficient with Windows XP and Conest 2000 Electrical Estimating Software
- National Electric Code, 40 Hour Code Seminar, Metropolitan Electrical Contractor Association
- 40 Hour OSHA 29 CFR 1910.120 Hazardous Waste Management Course
- Employee Assistance Program (EAP) coordinator for Virginia Power. (Volunteer). Developed **EAP Guide/Reference Manual** that was used by VEPCO and its affiliates throughout the Mid-Atlantic States.
- Completed two years of electrical training courses in electrical theory and residential, commercial wiring at W.T. Woodson Vocational School in Virginia.

APPENDIX G
WORK PLAN ADDENDUM

Work Plan Addendum 1
Response to NYSDEC Work Plan Comments
Revision 1

January 21, 2005

1. The work plan states that the contract will submit a Site Utilization Plan (Section 2.10) and a Construction Water Management Plan (Section 3.2.1). The Department must be given an opportunity to review, provide comments and accept these plans prior to the excavation work.

RESPONSE:

A) SITE UTILIZATION PLAN

The work site will be utilized as per the Work Plan-Site Plan drawing (Figure 1). Work in Area B, as designated on site plan drawings, will be completed first to minimize the risk of cross-contamination. Truck wash/decontamination pad will be moved to a location on roadway between work areas A and B to reduce area of site roadway that may be potentially contaminated. All vehicles operating in contaminated work areas will be decontaminated at truck wash before exiting site. A site entrance and exit are established as per site plan drawing.

Contaminated soil excavations in both Area A and Area B will proceed in the direction of ground water flow, generally southwest to northeast. The excavation in these areas will begin at the southwestern boundary designated on site drawings. Field screening of VOCs by PID, visual and olfactory observations will be initially utilized to determine the need to possibly extend the excavation further southwest. Field measurements will be compared to verification laboratory analysis results and objectives.

Contaminated soil located at the western extent of Area B, adjacent to the sewer lines, will be excavated last to limit potential ground water conducted by pipe backfill into the excavation. The excavation will not be less than 4 feet from the sewer lines.

Each Area will be excavated in stages. The reach of the machinery used will limit the volume of soil removed during each stage. The extent of the excavation will be field screened and subsequently laboratory analyzed prior to backfilling. Verification sample results will confirm adequate cleanup levels before the excavation is backfilled. Measurements and calculations will be made to determine the volume of the excavation prior to backfilling.

B) CONSTRUCTION WATER MANAGEMENT PLAN

Construction water is defined as that water which exists in soil excavation work areas or falls within the work area as precipitation. Physical barriers to separate water within the work area from water outside of the work area are described in the Erosion Control Plan (Section 2.0) of the Work Plan. The work area is shown in the Work Plan-Site Plan. Construction water will be contained in on-site

frac tanks and sampled and analyzed in accordance with the Sampling and Analysis Plan to see if it exceeds the discharge effluent limitations of the City of Schenectady Wastewater Treatment Plant. See Appendix A for City of Schenectady temporary discharge permit. If limitations are exceeded then water will be treated through the temporary water treatment system shown in The Treatment System Simplified Flow Schematic Figure 2 of the Work Plan. Handling, treating, sampling, and disposal of excavation dewatering water and residuals are specified in Section 02220 of the Design Report and in Section 3.2 of the Work Plan. All water generated from site activities will be managed, treated and discharged in accordance with all relevant standards, regulations and guidance. All construction water will be handled in accordance to Section 02511, Construction Water Management Plan, of the Design Report.

2. Section 2.0: The erosion control plan is lacking. More details need to be provided on how the contractor is going to prevent run-on and run-off. Erosion controls must be placed around the entire perimeter of the site unless there is an acceptable site related reason.

RESPONSE:

Section 2.9 of the Work Plan has been revised as follows:

2.9 EROSION & SEDIMENTATION CONTROLS

Erosion and sedimentation control procedures within the work area will include the placement of silt fence around the perimeter of the site as per contract drawings. Run-off areas will be addressed by grading these areas to divert storm water away from work areas. To prevent erosion, crushed stone and hay bales will be placed at areas that may potentially erode (embankments, run-off slopes, disturbed surfaces, etc.). Run on areas will be addressed additionally on an as needed basis.

Erosion and sedimentation control procedures will be implemented down-gradient of the perimeter of work areas and will occur as required immediately following any clearing or surface disturbance activities.

3. Section 2.1: How will the construction road be constructed? The road way from the site to the decontamination area will become contaminated and will need to be managed and disposed properly.

RESPONSE:

Road will be constructed of NYSDOT ITEM #4 Crusher Run Stone and graded in such a way that decontamination fluids can be collected and processed through the on-site water treatment system. Truck wash/decontamination pad will be moved to a location on road way between work areas A and B to reduce area of site roadway that may be potentially contaminated. The exit area of the site roadway will be kept clean and stone will be replaced, if necessary. A roadway profile drawing is attached.

4. Section 2.2: Due to the work being conducted in winter conditions, what precautions will

the contractor take to maintain the decontamination area.

RESPONSE:

A perimeter containment berm will be constructed around the contaminated stock pile area, work Area A and B, and the along the site road to contain and isolate contamination.

5. Dewatering: The Department requires that groundwater and construction water must be removed from the excavation to facilitate excavation of soil in relatively dry conditions. This must be done to assure that relatively dry material is forwarded to the disposal facility and to prevent a “soil washing” effect that can occur if contaminated soil is removed below the water table. Further, the excavation must be dewatered to allow for visual observations of the bottom and sides of the excavation, when confirmatory samples are collected, and when backfill is being placed. A similar statement must be placed in the work plan.

RESPONSE:

Sections 3.2 and 3.2.1 of the Work Plan have been revised as follows:

3.2 EXCAVATION DEWATERING

Dewatering, as necessary in order to efficiently and accurately excavate contaminated soil below the water table in excavations or trenches in the vicinity of Area A and Area B, will take place in strict accordance to Section 02220 of the Design Report.

The purpose of dewatering is to: facilitate excavation of soil in relatively dry conditions so the material is manageable; prevent “soil washing”; allow for visual observations of the excavation; and, allow for proper backfilling and compaction.

In summary, this task will consist of the following activities:

- Temporary wells will be installed to a sufficient depth below the area to be excavated to allow for pumping of water to create relatively dry soil conditions. These temporary wells will be relocated, as needed, in work area to facilitate dry soil excavation.
- Valley Equipment Company will provide and maintain proper and satisfactory means and devices for the removal of all water entering the excavations and will remove all such water as fast as it may collect in such manner as shall not interfere with the continuance of the work.
- A 3500 and 7500 gallon vacuum truck will be utilized for removal of water as needed.
- Water pumped or drained from the excavation encountered in the work, shall be treated and disposed of as described in the approved Construction Water Management Plan without injury to the work under construction or to roads or water courses. Figure 2 shows a schematic drawing of the water treatment system

6. There does not appear to be sufficient amount of on-site storage for water. A modest pumping rate from an excavation of 10 gallons per minute would fill the on-site storage capacity in 2 days.

RESPONSE:

Additional on-site frac tanks will be added as necessary and positioned near existing frac tanks as shown on the Work Plan- Site Plan. Additional frac tanks can be available in less than 24 hours.

7. Appendix C, Section 2.4: The waste haulers must have the appropriate NYSDEC permits.

RESPONSE:

Valley Equipment Company has the appropriate NYSDEC permits, N816 and 4A-515, to transport contaminated soils.

8. Appendix C, Section 2.4: The solid waste must be transported with either a non-hazardous waste manifest or some other document that accounts for the transportation.

RESPONSE:

A non-hazardous waste manifest form, as attached, will be used and will be added to Appendix E (Forms) of the Work Plan.

9. The engineer or contractor must provide the Department's representative with a desk and a phone line which provides the inspector a place to hook up a lap top computer and have a confidential phone conversation with other NYSDEC & DOH staff.

RESPONSE:

Upon request from the NYSDEC representative a desk and confidential work area will be provided utilizing existing facilities.

HEALTH AND SAFETY PLAN:

10. The Health and Safety Plan must be certified and signed by a certified Health and Safety Professional.

RESPONSE:

ECS has sent a signature letter. This was presented at site meeting on 1-19-05. Air monitoring will be conducted by ECS and in compliance with the HASP and NYSDOH Community Air Monitoring Plan. ECS is scheduled to be on site Monday 1-24-05 at 8:30 am.

11. Health and Safety Plan: The plan must reference and follow NYSDEC-DER-TAGM 4031, "Fugitive Dust Suppression and Particulate Monitoring at Inactive Hazardous Waste Sites".

RESPONSE:

ECS has sent a revised HASP. This was presented at site meeting on 1-19-05

12. Site Description, page 2: The wording describing total volatile organic compound action level is not consistent with Section 10.

RESPONSE:

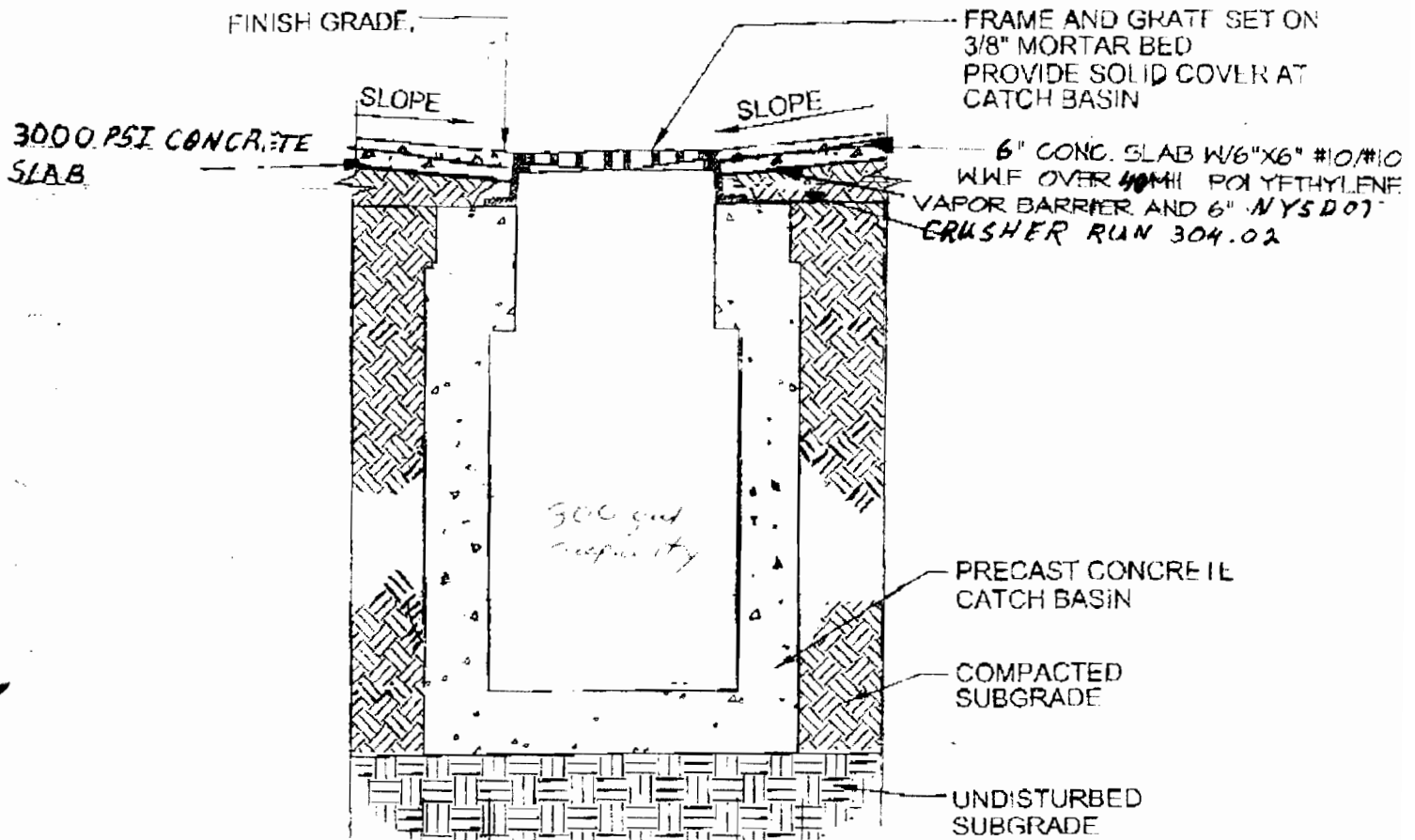
ECS has sent a revised HASP. This was presented at site meeting on 1-19-05

ADDITIONAL REVISIONS:

The second 2.10 section of the Work Plan (Cold Weather Conditions) should read section 2.11 instead.

APPENDIX H

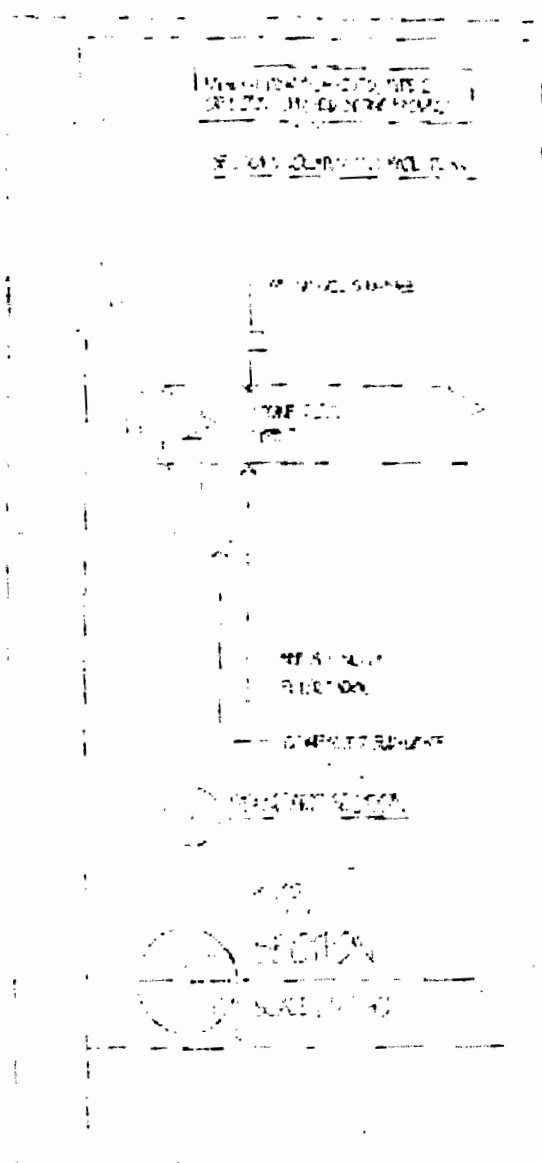
**DECONTAMINATION PAD AND
TEMPORARY ROAD CROSS-SECTION DETAIL**



NTS

PRECAST CONCRETE CATCH BASIN

VAC Truck will be onsite to handle pumps as needed



Roadway Detail



Customer: Holt Consulting

Contact:

Date: February 2, 2005

Location: BERP LOT 6 Riverside page 1 of 2

Scope of Work:

Project Number:

Project Manager:

Scope Item	Wk of 31-Jan-05			Wk of 7-Feb-05			Wk of 14-Feb-05			Wk of 21-Feb-05			Wk of 28-Feb-05			Wk of 7-Mar-05			Wk of 14-Mar-05					
	M	T	W	T	F	S	M	T	W	T	F	S	M	T	W	T	F	S	M	T	W	T	F	S
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2. Excavation																								
3. Water Pumping and Treatment																								
4. Backfill and Site Cleanup / Demobilize																								
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Project	Crew Size:	
	Vac Truck:	
	Excavator:	
	Backhoe:	
	Skid Steer:	
Machinery	Bull Dozer:	
	Crane ()::	
	Ram/Hammer:	
	Dump Truck:	
	Boom Truck:	
Requirements	Scissor Lift:	
	Compressor:	
	FG pipe tools:	
	Flex pipe tools:	

Customer: Holt Consulting

Contact:

Date: February 2, 2005

Location: BERP LOT 6 Riverside page 2 of 2

Scope of Work:

Project Number:

Project Manager:

Scope Item	21-Mar-05			28-Mar-05			4-Apr-05			11-Apr-05			18-Apr-05			25-Apr-05			2-May-05					
	Wk of			Wk of			Wk of			Wk of			Wk of			Wk of			Wk of					
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Project	Crew Size:	
	Vac Truck:	
	Excavator:	
	Backhoe:	
	Skid Steer:	
Machinery	Bull Dozer:	
	Crane ():	
	Ram/Hammer:	
	Dump Truck:	
	Boom Truck:	
Requirements	Scissor Lift:	
	Compressor:	
	FG pipe tools:	
	Flex pipe tools:	