workplan.hw. 835013, 2008-08-18. Doo4439-09\_MPI.pH

From:

Lisa Lewis

To:

Flusche, Mark A.

Date:

8/18/2008 10:46:15 AM

Subject:

Re: Revised IDW Disposal Quote - Modock Road Springs RI/FS

Mark-

The information sent to me is completely acceptable. Please go ahead and use EP&S for disposal of the 3 drums.

Lisa

Lisa M. Lewis
Contract Manager
NYS Dept. of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management
Contracts & Payments Section
625 Broadway, 12th Floor
Albany, NY 12233-7012

Phone: (518) 402-9601 Fax: (518) 402-9722

Email: Imlewis@gw.dec.state.ny.us

>>> "Flusche, Mark A." <MFlusche@PIRNIE.com> 8/18/2008 10:30 AM >>> Lisa,

EWMI was our selected investigation derived waste (IDW) disposal firm for the Modock Road Springs RI/FS, but we would like to switch to EP&S. The installation of the monitoring wells produced significantly less IDW than expected (3 drums of soil compared to 20 drums in our original scope). Applying the original unit rates for 3 drums, EP&S becomes the low quotation. The installation of the final wells occurred later than anticipated and EP&S has submitted a revised quote which is attached and would increase costs by \$135. As shown on the attached PDF, the revised EP&S costs are less than the original quotes from the other two firms for disposal of three drums and much lower than the IDW disposal budgeted in the 2.11s.

We would appreciate your input on this as to how we should proceed.

Thanks, Mark

Mark A. Flusche - Project Hydrogeologist - Malcolm Pirnie, Inc. 43 British American Blvd. Latham, NY 12110 - 518-782-2125 (phone)

- 518-782-0500 (fax) - <u>mflusche@pirnie.com</u> <<u>mailto:mflusche@pirnie.com</u>> - <u>www.pirnie.com</u> <<u>http://www.pirnie.com/</u>>

CC:

Lang, Daniel; Nelson, Bruce R.; Pelton, Jason

40 Hamilton Lane Glenmont, NY 12077 Website: www.epsofvermont.com



PHONE: (518) 465-4000 FAX: (518) 465-5722 1-800-5SPILLS

August 5, 2008

Mark Flusche

Malcolm Pirnie, Inc.

43 British American Boulevard

Latham, NY 12110-1402

RE: Drill Cuttings, Purge Water Transport and Disposal Rochester, NY area

Ms. Thomas:

Environmental Products and Services of Vermont, Inc. (EPSVT) is pleased to present the following proposal:

#### Work Scope:

 Provide transportation and disposal services to pick up three (3) drums of nonhazardous soil drill cuttings.

## Job Costs:

Mobilization / Demobilization

\$ 440.00

**Disposal Costs** 

\$ 190.00 per drum

EPSVT assumes the following conditions will be met and agreed upon prior to work scope commencement:

- EPSVT will have access to the storage area for the duration of job activities.
- No actions beyond the control of EPSVT shall delay the completion of the work scope, and as such any delays will be billed according to EPSVT 2008 Time and Material Rates.

- All waste will conform to signed profiles. Any off spec charges will be billed in addition to any quoted disposal rates.
- Any necessary analytical will billed at cost plus 20%.
- EPSVT assumes job is not to be performed at Prevailing Wage rates.

Thank you for the opportunity to provide you with this proposal. If you have any questions or require additional information, please feel free to call our Albany office.

Sincerely,			•		
		7 \		•	
Patrick Mo					
Environme Project Co	ental Products ar oordinator	nd Services of	Vermont, Inc.		
		١			
Name		Title		Date	

All work will conform to local, state and federal regulations. If this job is quoted, any disposal or other work beyond the scope of work described above, unless agreed to in writing, will be billed at current-Time & Material rates. All containerized waste must meet US DOT "UN" packaging standards if it is a hazardous DOT material. If the packaging does not meet these standards, EPSVT will over pack the container and all associated cost will be billed at current Time and Materials rates. This quote excludes all applicable taxes and is valid for 30 days from the above date and subject to verification thereafter. Standard payment terms are cash in advance, Visa/Mastercard/American Express or phased billing with credit approval on net 10 days. Services charges may be imposed at 1.5 % /month on all balances over 30 days. Customer will be responsible for all costs of collection, including but not limited to reasonable attorney's fees, court costs, and collection service fees. Should the above terms of sale conflict with customers purchase order terms, the terms of this authorization take precedence. Customer agrees to indemnify, exonerate, and hold Environmental Products & Services of Vermont, Inc. harmless against loss, damage, or expense, by reasons of suits, claims demands, judgments, and causes of action for personal injury, death, or property damage rising out of or in any way in consequence of the performance of all work undertaken by Environmental Products & Services of Vermont, Inc. except that in no instance shall the customer be held responsible for any liability claim demand or cause of action solely attributable to the negligence of Environmental Products & Services of Vermont, Inc. I agree to accept the labor, materials and equipment utilization as reported on the Environmental Products & Services of Vermont, Inc. Daily Job Report. If I wish to have them reviewed, I will have a representative on site at the completion of work each day to review and sign the Daily Job Report.



# IDW DISPOSAL DRILLING SERVICES MODOCK ROAD SPRINGS SITE

#### IDW costs assuming disposal of 20 drums with original quotes

DESCRIPTION	UNITS	EWMI	EP&S	Op Tech	EWMI	EP&S	Op Tech
		UNIT COSTS (\$)			COSTS (\$)		
Mobilization/demobilization	1 1	\$1,200.00	\$350.00	\$495.00	\$1,200.00	\$350.00	\$495.00
Disposal Rate (per drum)	20_	\$95.00	\$175.00	\$193.00	\$1,900.00	\$3,500.00	\$3,860.00
Total			*.		\$3,100.00	\$3,850.00	\$4,355.00

#### IDW costs assuming disposal of 3 drums with original quotes

DESCRIPTION	UNITS	<b>EWMI</b>	EP&S INIT COSTS (\$	Op Tech	EWMI	EP&S COSTS (\$)	Op Tech
		04.000.00	0050.00	0405.00	64.000.00	<b>6050.00</b>	£405.00
Mobilization/demobilization	1	\$1,200.00	\$350.00	\$495.00	\$1,200.00	\$350.00	\$495.00
Disposal Rate (per drum)	3	\$95.00	\$175.00	\$193.00	\$285.00	\$525.00	\$579.00
Total					\$1,485.00	\$875.00	\$1,074.00

#### IDW costs assuming disposal of 3 drums with revised EP&S quote

DESCRIPTION	UNITS	EWMI	EP&S JNIT COSTS (\$	Op Tech	EWMI	EP&S COSTS (\$)	Op Tech
Mobilization/demobilization	1	\$1,200.00	\$440.00	\$495.00	\$1,200.00	\$440.00	\$495.00
Disposal Rate (per drum)	3	\$95.00	\$190.00	\$193.00	\$285.00	\$570.00	\$579.00

Total \$1,485.00 \$1,010.00 \$1,074.00

From:

Lisa Lewis

To:

Nelson, Bruce R.

Date:

7/22/2008 9:05:03 AM

Subject:

Re: Revised Survey Quote - Modock Road Springs RI/FS

Bruce-

I am fine with the additional cost for Popli. This e-mail and attachment serve as sufficient notice, and we will just handle the additional cost of the work at closeout.

Thanks, Lisa

Lisa M. Lewis
Contract Manager
NYS Dept. of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management
Contracts & Payments Section
625 Broadway, 12th Floor
Albany, NY 12233-7012

Phone: (518) 402-9601 Fax: (518) 402-9722

Email: Imlewis@gw.dec.state.ny.us

>>> "Nelson, Bruce R." <BNelson@PIRNIE.com> 7/21/2008 5:47 PM >>> Lisa:

Popli was our selected surveyor for the Modock Road Springs RI/FS. The installation of the final wells occurred later than anticipated and Popli has submitted a revised quote which is attached and would increase costs by \$442.

We would appreciate your input on this as to how we should proceed.

Thanks,

--Bruce

Bruce R. Nelson, C.P.G.

Senior Associate

Malcolm Pirnie, Inc.

43 British American Blvd.

Latham, NY 12110

(518) 782-2115 (direct)

(518) 782-0500 (fax)

bnelson@pirnie.com

CC:

Flusche, Mark A.; Lang, Daniel; Pelton, Jason



555 PENBROOKE DRIVE PENFIELD, NY 14526-2035 TEL: (585) 388-2060 FAX: (585) 388-2070

July 21, 2008

Malcolm Pirnie, Inc. 43 British American Blvd. Latham, NY 12110

Attn: Mr. Mark A. Flusche

Re: Modock Road Springs Site,

Town of Victor, Ontario County

Work Assignment Number D-004439-9

Dear Mark,

Popli Consulting Engineers and Land Surveyors is pleased to provide a *revised for 2008* lump sum quote of \$4,130.00 for professional services at the subject site.

Our understanding of the work is as follows:

- Recover existing survey control points.
- Locate approx. 22 additional wells in the area.
- Reduce survey notes and measurements & prepare tabulated data on well locations and elevations.
- Submit files.

Our assumptions for this work are as follows:

- 1) NYS DOL wage rates do not apply
- 2) Access to the site will not be impeded.
- 3) Survey control points set previously will be recovered in good condition.
- 4) There are approximately 22 wells to be surveyed on NYSP NAD83/96 & UTM coordinates with NAVD 88 elevations.

If you have any questions, please contact me at (585) 388-2060 or mventuro@popligroup.com

Very truly yours,

Michael A. Venturo, LS

cc File

# New York State Department of Environmental Conservation Division of Environmental Remediation. 12th Floor

625 Broadway, Albany, New York 12233-7011 **Phone:** (518) 402-9706 • **FAX:** (518) 402-9020

Website: www.dec.state.ny.us

November 1, 2007



Mr. Bruce Nelson Malcolm Pirnie, Inc. 43 British-American Boulevard Latham, NY 12110

RE: Work Plan Approval/Notice-to-Proceed

Work Assignment #D004439-9

Modock Road Springs/DLS Sand & Gravel, Inc.

Site #835013

Dear Mr. Nelson:

The New York State Department of Environmental Conservation's Division of Environmental Remediation (DER) approves Malcolm Pirnie's work plan dated August 2007 for the above-referenced project. The work plan is for a total work assignment budget of \$520,574 for the development and implementation of a Remedial Investigation/Feasibility Study. The RI will expand on earlier site investigations and the IIWA; provide a thorough characterization of the nature and extent of contamination; and provide the necessary data to evaluate interim remedial measures (if necessary) and conduct a feasibility study. The FS will identify and evaluate possible alternatives available to remediate the site and will be used as the basis for selecting a preferred remedial alternative.

DER authorizes your firm to proceed with the scope of work in this work plan. All work should be completed in accordance with the schedule in the work plan.

If you have any questions regarding this work plan, please contact the Project Manager, Mr. Jason Pelton, at (518) 402-9812.

Sincerely,

Dale A. Desnoyers

Dale A. Desnoyers
Director
Division of Environmental Remediation

# ec: <u>bnelson@pirnie.com</u>

- J. Pelton, PM
- L. Lewis, CM
- B. Putzig, Region 8
- D. Desnoyers
- D. Weigel
- M. Cruden
- W. Daigle
- J. White
- S. Gupta
- V. Alfonso, M/WBE
- T. Christian, M/WBE
- T. Wolosen

# New York State Department of Environmental Conservation Division of Environmental Remediation. 12th Floor

625 Broadway, Albany, New York 12233-7011 **Phone:** (518) 402-9706 • **FAX:** (518) 402-9020

Website: www.dec.state.ny.us



May 1, 2007

Mr. Bruce Nelson Malcolm Pirnie, Inc. 43 British-American Boulevard Latham, NY 12110

Re: WA Issuance/Conflict of Interest Letter

Modock Road Springs, Site #8-35-013

Dear Mr. Nelson:

The New York State Department of Environmental Conservation's Division of Environmental Remediation (DER) is issuing to your firm the work assignment (WA) identified below. This WA has been identified by your firm's I/D contract number and the next sequential WA number.

 Contract/WA No.:
 D004439-9

 Site/Spill No./PIN:
 8-35-013

Site/Spill Name: Modock Road Springs/DLS Sand & Gravel

**Program Element:** Remedial Investigation/Feasibility Study (RI/FS)

WP Dev. (WPD) Budget: \$144,875 Est. Total WA Budget (includes WPD): \$388,025 Project Manager (PM): Jason Pelton PM Phone No.: (518) 402-9812

**PM E-mail:** jmpelton@gw.dec.state.ny.us

Contract Manager (CM): Ralph Burger (CM Phone No.: (518) 402-9752

*CM E-mail:* reburger@gw.dec.state.ny.us

M/WBE Administrator: Vincente Alfonso M/WBE Phone No: (518) 402-9311

M/WBE E-mail: vxalfons@gw.dec.state.ny.us

Please review your firm's relationship with the Potential Responsible Parties (PRPs) indicated on the enclosed Conflict of Interest Certification form. Then sign and complete the form and accept the WA by returning the document to the contract manager within 10 calendar days of the date of this letter.

Please initiate the development of a project management work plan for this WA. It is expected that one (1) electronic and two (2) paper double-sided copies of the work plan will be submitted to DER's contract manager within 21 calendar days of receipt of this work assignment. Final project

management work plans and budgets are to be developed so that a Notice to Proceed can be issued within 90 calendar days of the date of this letter. Failure to do so may result in termination of this WA and may affect your firm's receipt of future WAs.

The project management work plan submitted to DER must include the items listed below. If multiple sites are included in the WA, information should be provided for each site and the total WA.

- 1. Site description (i.e. location, environmental history).
- 2. Scope of work (i.e. tasks, subtasks).
- 3. Detailed schedule with milestones and deliverables.
- 4. Identification of areas of work requiring subcontracting and the certified M/WBE firms to be utilized, if known.
- 5. A detailed budget broken down by tasks and subtasks using the most current schedules provided by DER. The budget (i.e. titles, rates) should be in accordance with your executed standby contract.
- 6. A staffing plan identifying the management and technical staff assigned to the WA. Include resumes of staff not previously approved by DER.
- 7. An M/WBE Utilization Plan. If the plan does not meet the goals in the standby contract, an explanation must be provided. Contact DEC's M/WBE Office if you have questions.

If you have any questions regarding contract issues, please contact the contract manager indicated. If you have any questions regarding the WA's scope of work, please contact the project manager indicated. The project manager has prepared the enclosed document for your use in preparing the WA. Please contact the project manager to schedule a WA scoping meeting and site visit, if appropriate.

Requests for reimbursement cannot be processed until the draft project management work plan is submitted to DER for approval.

Sincerely,

Michael J. Cruden, P.E.

Miss al

Chief, Contracts and Payments Section

Bureau of Program Management

Division of Environmental Remediation

ec:

- J. Pelton, PM
- R. Burger, CM
  B. Putzig, Region 8
  M. Cruden
  S. Gupta
  T. Wolosen

- E. Belmore
- J. White
  B. Moulhem

From:

Ralph Burger

To:

bnelson@pirnie.com; Putzig, Bart

Date:

5/1/2007 2:02:16 PM

Subject:

Re: Modock Road Springs, Site #8-35-013, WA D004439-9

Thank you. I thought it was a typo.

>>> Bart Putzig 5/1/2007 1:45 PM >>> FYI - it is Syracus<u>a</u> Sand and Gravel, not Syracus<u>e</u>.

Bartholomew H. Putzig Regional Hazardous Waste Remediation Engineer NYSDEC, Region 8 6274 East Avon-Lima Road Avon, NY 14414 585-226-5349 bxputzig@gw.dec.state.ny.us

#### >>> Ralph Burger 05/01/07 1:27 PM >>>

Hi Bruce, Lisa is doing some real work having her baby. We should hear from her by tomorrow. I will be substituting for her for the next 3 months as contract manager on both your contracts. Attached is the new Modock work assignment. I know you already sent in a conflict of interest form on the WA #1 but we should have one for this work assignment file also just to keep any auditors happy. Since we have a meeting scheduled for tomorrow I will give you a hard copy of it then. I look forward to working with you. Ralph

**CC:** Belmore, Edward; Cruden, Michael; Gupta, Swapan; Moulhem, Brenda; Pelton, Jason; White, Joseph; Wolosen, Tim

# New York State Department of Environmental Conservation Division of Environmental Remediation

# **Standby Engineering Contract Conflict of Interest Certification**

To the best of the Department of Environmental Conservation's knowledge, the potential responsible parties listed below are the known potential responsible parties as of the issuance date of the enclosed work assignment letter.

- DLS Sand & Gravel, Inc.

- Syracus¢ Sand & Gravel, Inc.

DR

The undersigned authorized representative, for the contractor indicated below, hereby certifies for the contract number and work assignment number identified below that to the best of his/her knowledge the contractor has no organizational or personal conflict of interest with the potential responsible parties listed above, as defined in Appendix B, Section III, Conflict of Interest of the executed standby engineering contract indicated below.

# Certified By:

I acknowledge receipt and acceptance of this WA as the contractor's authorized representative. I also acknowledge that the contractor has no conflict of interest.

Namel Les venlen	5/2/07
Signature of Contractor's Authorized Representative	Date
MALCOLM PIRNIE, INC.	
Contractor Name	
0004439~9	-
Contract/WA No.	
8-35-013	
Site/Spill/PIN No.	
MODERN ROAD SPRINGS	<del></del>
Site/Spill Name	

# New York State Department of Environmental Conservation Division of Environmental Remediation

# Standby Engineering Contract Conflict of Interest Certification

To the best of the Department of Environmental Conservation's knowledge, the potential
responsible parties listed below are the known potential responsible parties as of the issuance
date of the enclosed work assignment letter.

- DLS Sand & Gravel, Inc.
- Syracuse Sand & Gravel, Inc.

The undersigned authorized representative, for the contractor indicated below, hereby certifies for the contract number and work assignment number identified below that to the best of his/her knowledge the contractor has no organizational or personal conflict of interest with the potential responsible parties listed above, as defined in Appendix B, Section III, Conflict of Interest of the executed standby engineering contract indicated below.

#### Certified By:

I acknowledge receipt and acceptance of this WA as the contractor's authorized representative. I also acknowledge that the contractor has no conflict of interest.

Signature of Contractor's Authorized Representative	Date
Contractor Name	
Contract/WA No.	
Site/Spill/PIN No.	· .
Site/Spill Name	· · ·

# STATE SUPERFUND STANDBY CONTRACT WORK ASSIGNMENT SITE INVESTIGATION PROJECT CONTRACT TYPE: COST PLUS FIXED FEE

Site Name: Modock Road Springs/DLS Sand & Gravel Site, Site No. 8-35-013 Program Element: RI/FS

NYSDEC Project Manager: Jason Pelton

#### I. Summary of Site History and Background

#### Site History

The Modock Road Springs site is located in a rural/suburban area in the Town of Victor, Ontario County, New York. Data collected during previous investigations document the presence of chlorinated volatile organic compounds (CVOCs) including Trichloroethene (TCE), 1,1,1-Trichloroethane (1,1,1-TCA), and Dichloroethene (DCE) in groundwater beneath a residential area in the Town of Victor. Groundwater contamination was initially discovered in February 1990 during a New York State Department of Health (NYSDOH) initiative to sample small community water supplies across New York State. During this community water supply sampling, the Village of Victor public water supply at the Modock Road Springs was found to contain total VOC concentrations of greater than 200 parts per billion (ppb). Both TCE and 1,1,1-TCA were detected in the spring water at concentrations above the NYSDOH Part 5 drinking water standards of 5 ppb. As a result, the use of the springs as a public water supply ceased and the Village of Victor was connected to the Monroe County Water Authority as a source of supply.

A series of subsequent investigations identified a groundwater plume that extended from a source area south of the Modock Road Springs on the DLS Sand & Gravel, Inc. property east of Malone Road. The groundwater plume was found to extend approximately one mile from this source area to the north where it discharges at the springs near Modock Road. Over the length of the groundwater plume, total CVOC concentrations ranged from approximately 16 ppm near the source to 250 ppb at the spring. During the investigation activities, groundwater samples were collected from a series of domestic water supply wells and CVOCs were detected in four of the residential wells. The use of the impacted residential wells was subsequently discontinued and the residences were connected to the municipal water supply. The groundwater data indicate that only shallow wells (< 100 feet deep) have been impacted whereas deeper bedrock wells (>150 feet deep) have not shown evidence of CVOC contamination.

At most locations in areas near the groundwater plume, the depth to groundwater is greater than 50 feet below ground surface. At the Modock Road Springs, groundwater discharges at over 150 gallons per minute into a wetland and stream. The wetlands are part of the headwaters of tributary 30 of Irondequoit Creek, contaminants in the wetland/stream decrease

from about 50 ppb total VOCs to near undetectable levels within a quarter mile downstream (north) of the springs.

Vapor intrusion sampling completed in February, March, and April of 2007 as part of an Immediate Investigation Work Assignment (IIWA) documents that vapor intrusion is occurring at one residential property over the groundwater plume (as of April 17, 2007). Vapor intrusion sample results received and reviewed as of April 17, 2007 indicate that follow-up monitoring is required at 7 additional properties.

As previously mentioned, data collected to date (analytical sampling results, groundwater elevations, hydraulic gradients, and groundwater flow direction) indicate that the source of the contamination is located on DLS Sand & Gravel, Inc. (Syracusa) property. Although access to this property has occasionally been limited, the results of investigative work completed in 2001, documented elevated levels of CVOCs in groundwater flowing northward from the Syracusa gravel pit.

A groundwater investigation completed by Leader Professional Services for Syracusa Sand and Gravel, Inc. in November 2002 concluded that the groundwater contamination is unrelated to operations at the Syracusa Sand and Gravel, Inc. facility. Instead, they conclude that the contamination originated off of the Syracusa Sand and Gravel, Inc. property, in the vicinity of the MW-14, and migrated in the vadose zone down a low permeability unit onto the Syracusa Sand and Gravel, Inc. property. Leader Professional Services further concludes that the contamination entered the saturated zone on the Syracusa Sand and Gravel, Inc. property and was influenced by pumping of the Syracusa Sand and Gravel, Inc. production well.

This Syracusa property was listed on the New York State Registry of Inactive Hazardous Waste Disposal Sites as a class 2. A site is listed as a Class 2 when a consequential quantity of hazardous waste has been confirmed and the presence of such hazardous waste or its components or breakdown products represent a significant threat to the environment or to health as described in 6 NYCRR Part 375-1.4. In August of 2006, the site was referred to the Division of Environmental Remediation for the completion of a state funded Remedial Investigation and Feasibility Study (RIFS)

The RIFS will focus on identifying a specific source area for the groundwater contamination, better defining the extent of the groundwater plume, further evaluating the potential for vapor intrusion, and assessing remedial alternatives to address the source area and off-site groundwater plume. The selected state superfund contractor will complete the RIFS in accordance with the scope of work outlined in Section II below.

#### Site Surroundings

The DLS Sand & Gravel, Inc. property is located in a rural portion of Ontario County. Directly north of the DLS Sand & Gravel, Inc. property, in the area of the dissolved groundwater plume, land use is predominantly agricultural. Further to the north, between Dryer Road and Modock Road, land use becomes rural residential with some recent home construction. A second sand and gravel mine, also located on Malone Road, is directly west of the DLS Sand & Gravel, Inc. property. The sand and gravel mine is owned and operated by Hansen Aggregates New York, Inc.

The topography in the area of the groundwater plume generally slopes downward to the north, but consists of rolling hills with elevations varying from approximately 620 feet above mean sea level (AMSL) near the Modock Road Springs to approximately 900 feet AMSL near the DLS Sand & Gravel, Inc. property.

#### Site Geology and Hydrogeology

Modock Road Springs are located in the transition zone between the Erie-Ontario Lake Plain and the Appalachian Upland Physiographic Provinces. The Modock Road Springs are situated along the lower slope of a large kame moraine complex formed by meltwater issuing from a stagnating continental glacier over ten thousand years ago. Large gravel pits (DLS Sand & Gravel, Inc. and Hansen Aggregates New York, Inc.) along the crest of this kame moraine complex expose thick sequences of stratified sands, gravels, and occasional clay layers which underlie the hummocky topography. The permeable soils of this moraine complex provide groundwater recharge areas for regional aquifer systems, such as the Irondogenesee Aquifer (incised buried valley of the pre-glacial Genesee River; coincident with present-day Irondequoit Creek). At distinct changes in topography (e.g., toe of slope) and stratigraphy (e.g., clay layers), groundwater may daylight as springs and wetlands. Small spring-fed streams, which discharge at Modock Road Springs and other springs in the area, form the headwaters of Irondequoit Creek.

Past investigations indicate that groundwater flows from the south near the DLS Sand & Gravel, Inc. property to the north toward the Modock Road Springs. The depth to groundwater varies considerably depending upon location within the hummocky kame deposits. Specifically, at the MW-5 location, groundwater occurs at a depth of approximately 10 feet below ground surface. At the MW-10 location along Surrey Lane and at the MW-14 location further to the south of MW-10, groundwater occurs at a depth of approximately 80 feet and 60 feet below ground surface respectively. Available data indicate that the uppermost water-table aquifer is impacted with the CVOC contamination. A low permeability clay layer of unknown extent appears to restrict groundwater contamination to the uppermost, approximately 10-foot thick, zone of saturated sand. The overall ability for the low permeability clay layer to prevent the downward migration of contaminated groundwater from deeper overburden intervals will be further assessed as part of this work assignment. Depth to bedrock (Bertie Formation/Onondaga Limestone) varies from roughly 150 to 200 feet. Bedrock wells have not shown contamination (e.g., no detections in a 205foot well at 7570 Dryer Road immediately west of the impacted 77-foot well at 7560 Dryer Road).

### Section 2 Scope of Work

Services required of the standby consultant include the development and implementation of a Remedial Investigation/Feasibility Study (RI/FS). The RI will expand on earlier site investigation work, and the IIWA, and will provide a thorough characterization of the nature and extent of contamination originating at the site, and will provide the necessary data to conduct an FS. The FS will identify and evaluate possible alternatives available to remediate the site and will be used as the basis for selecting a preferred remedial alternative.

In order to implement the referenced tasks, the consultant should submit a detailed RI/FS work plan. This work plan should provide all the pertinent information on the field work,

well construction details, sampling locations and methods, number of samples to be analyzed, parameters to be analyzed, analytical methods to be employed, and a detailed project schedule. Any portions of the RI which will be decided in the field should be clearly identified.

The work plan should also include a sampling and analysis plan, health and safety plan (HASP) and a Quality Assurance Project Plan (QAPP). The QAPP should include a summary table which presents anticipated samples collected for laboratory analysis, media sampled, methodology, and anticipated Quality Assurance/Quality Control (QA/QC) samples. The HASP should contain a section on community health and safety.

All quality assurance protocols (both ASP and non-ASP), as outlined in Schedule 1F, Work Element VI of the Standby Contract, must be provided in the QAPP and approved by the Department. Deviations from protocols specified in the QAPP must be approved in advance by the Department. The consultant is responsible for ensuring that the laboratory maintains DOH ELAP certification in all categories of CLP and Solid and Hazardous Waste analytical testing for the duration of the contract or project.

The preparation and submittal of Data Usability Summary Reports (DUSRs) is mandatory for the first round of analytical results. The need for DUSRs in subsequent rounds of analytical work will be determined by the Department.

The overall objectives of this RI/FS Work Assignment (WA) for the Modock Road Springs site are to:

- Complete a comprehensive on-site and off-site soil gas investigation to identify possible source areas, to possibly eliminate specific locations as disposal areas, and to identify subsequent direct push and hollow stem auger drilling locations;
- Expand on the direct push drilling and soil sampling program completed during earlier investigation activities to identify possible source areas and to characterize the overall distribution of contaminants in the overburden system near the source area. This will include a follow-up direct push drilling program;
- Characterize the distribution of contaminants in the overburden groundwater system, fully
  define the overburden stratigraphy, and define the limits of the groundwater plume
  through the installation of a series of shallow and deep overburden groundwater
  monitoring wells and the collection of both soil and groundwater samples for laboratory
  analysis;
- Based on the distribution of contaminants and groundwater flow patterns, determine the
  hydraulic relationship between the groundwater system, the Modock Road Springs, the
  nearby wetlands, and Irondequoit Creek;
- Perform follow-up sub-slab and indoor air sampling to evaluate the migration of vapors into on-site and off-site buildings; and
- Conduct a site survey and prepare a base map.

#### Task 1 - Background Review and Preparation of Work Plans

Upon receipt of the Work Assignment (WA), the consultant's Project Manager will contact the Department Project Manager to discuss and verify the work to be completed prior to a scoping meeting. An electronic version of this WA will be provided to the consultant by the Department to expedite production of the Project Management Work Plan.

# Subtask 1.1 Project Management Work Plan (PMWP)

#### 1.1.1 Historical Records and Title Search

Available historic and/or background information (documents, maps, etc.) and records provided by the Department or located in the archives of the Village and/or Town of Victor and Ontario County will be reviewed. Potential sources and areas of contamination will be identified through examination of historic records, aerial photographs, and other site background information. The consultant is to review the existing site investigation records. An electronic version of these documents will be provided to the consultant by the Department Project Manager.

Tax maps and records will be reviewed to determine land ownership of the site and adjacent properties to the extent not previously accomplished. To further assess previous site activities, available aerial photographs will be examined. The photographs should span the time of active operations at the site, as well as a reasonable time period prior to and subsequent to said operations.

#### 1.1.2 Site Visit:

A site visit will be conducted with the consultant and the Department Project Manager. The site visit should be conducted prior to the scoping session with the Department. Arrangements with the site owner will be made by the Department Project Manager.

#### 1.1.3 Scoping Session:

A scoping session will be held at the Department headquarters located at 625 Broadway in Albany following the site visit and record review. At least two days prior to the scoping session, the consultant will submit three copies of the preliminary Project Management Work Plan (PMWP) to the Department Project Manager and one copy to the NYSDOH contact. The preliminary PMWP will include the scope of work given in this Work Assignment and any modifications which are consistent with the project budget and schedule. A preliminary budget and a staffing plan should also be included in the PMWP. The preliminary budget should include the summary of the work assignment price, 2.11(a), the direct labor hours budgeted, 2.11(b), and the monthly cost control report including subcontractor fees, 2.11(g).

During the scoping session and based on the existing records review, the consultant will present a summary of information regarding the nature and extent of contamination at the site. At a minimum, the details of the following items will be discussed and agreed upon:

- 1. The tentative scope of the field investigation;
- 2. The total number of samples and analyses for each media;

- 3. The expectations for the RI Report;
- 4. The approach to the FS; and
- 5. The project schedule.

Any significant issues regarding the overall project will be resolved at this time and a final budget for completing Subtask 1.2 will be established.

Once completed, the PMWP will include the project scope of work, the final budget, the project schedule, the staffing plan, and the Minority and Women Owned Business Enterprise (M/WBE) and Equal Opportunity (EEO) Utilization Plan. The final budget will include all subcontract fees.

#### 1.1.4 Project Management Work Plan:

The Subtask 1.1 deliverable will be a draft final PMWP which will be delivered within three (3) weeks of the scoping session. It will include:

- (1) A draft of the Field Activities Plan (FAP) which summarizes the number and locations of the environmental samples to be obtained with proposed analyses. The FAP should rely on tables and figures for detailing the plan. This plan will also include the names and addresses of all property owners that the Department must contact to properly obtain site access.
- (2) Detailed level of effort and budget for Subtasks 1.2 (Preparation of the RI/FS Work Plan), 1.3, 1.4, 1.5, 1.6, and 1.7 (field activities included as part of Task 1).
- (3) Preliminary estimate of the level of effort and budget for conducting the RI/FS.
- (4) Preliminary estimate of the WA progress schedule, including milestones and deliverables.
- (5) Project Staffing Plan identifying key management and technical staff assigned to conduct the work elements, including resumes, NSPE grade levels and a listing of their areas of specialization and project responsibilities.
- (6) Identification of work items to be subcontracted, including a Minority and Women Owned Business Enterprise (M/WBE) and Equal Opportunity (EEO) Utilization Plan.

# Subtask 1.2 Preparation of the RI/FS Work Plan:

Within three weeks after the approval of the draft final PMWP by the Department, the consultant will submit the complete PMWP and the draft final RI/FS Work Plan which will contain the following:

(1) Final FAP including all procedures for completing the field investigation.

- (2) Site Specific Health and Safety Plan (HASP) and Community HASP. A Community Air Monitoring Plan may be required if any intrusive field activities are conducted (e.g., test pitting).
- (3) Site Specific Quality Assurance Project Plan (QAPP).
- (4) Final Budget (2.11 forms) and supporting documentation of bids.

If necessary, a meeting between the consultant and the appropriate Department staff will be held at 625 Broadway in Albany to review the comments and details of the draft final RI/FS Work Plan. A reasonable time period will be allowed for revisions and submittal of the final RI/FS Work Plan. The consultant is expected to prepare an initial draft with one revision.

Once the RI/FS Work Plan and the final PMWP are approved, a Notice to Proceed (NTP) will be issued for the remainder of the WA. The total time for the NTP to be issued to the consultant should not exceed 90 days after the issuance of the WA unless unanticipated circumstances are encountered.

#### Subtask 1.3 Completion of Passive Soil Gas Investigation:

In advance of the drilling programs outlined in Subtasks 1.4 and 1.5, a passive soil gas investigation, using Emflux® samplers, or comparable, will be completed during implementation of Task 1 of this work assignment. The passive soil gas investigation will be completed to primarily identify potential source areas, to characterize the lateral extent of shallow soil contamination, and to possibly remove certain areas from consideration as suspect disposal areas.

The soil gas monitoring will be performed according to a pre-defined, evenly-spaced sampling grid. This includes the northern portion of the DLS Sand and Gravel property and the area near monitoring well MW-14. In total, it is expected that approximately 100 passive soil gas samplers will be deployed as part of the passive soil gas investigation included in Subtask 1.3.

The vadose zone monitoring will be used to optimize subsequent site characterization activities during implementation of the direct push program and subsurface drilling programs included in Subtasks 1.4, 1.5, 2.2, and 2.3. The vadose zone monitoring will be completed using an acceptable passive soil gas methodology and will include the collection of Quality Assurance and Quality Control samples.

Immediately upon deploying the passive soil gas samplers, the consultant will mark the sample location with a survey flag. Each survey flag will include sample identification information that can be used by Department staff during a subsequent high precision global positioning system (GPS) survey. At each sampling location, the consultant will use a part per billion sensitive photoionization detector to screen shallow soil gas for volatile organic compounds (VOCs) at the respective passive soil gas sampling point.

# Subtask 1.4 Direct Push/Geoprobe Drilling:

A direct push drilling program will be implemented as part of this RI/FS to evaluate the overburden unit in specific areas identified following completion of Subtask 1.3 (Soil Gas Investigation). The direct push drilling program will additionally expand on work completed as part of the earlier investigation activities. Similar to the soil gas investigation, it is expected that the majority of the direct push soil borings will be advanced in the northern portion of the DLS Sand and Gravel property. However, some borings will be advanced near the Modock Road Springs as described below. Subtask 1.4 will include the following components:

- (1) <u>Shallow Direct Push Soil Borings</u> Advancement of up to 20 shallow soil borings on the DLS Sand and Gravel property. It is expected that the shallow soil borings will be advanced to a depth of approximately 10 to 20 feet below ground surface to evaluate shallow soil quality and possible disposal areas identified during the soil gas investigation.
- (2) <u>Shallow Soil Borings and Groundwater Sampling Near Springs</u>- Advancement of up to 5 shallow soil borings near the Modock Road Springs to define subsurface stratigraphy and to evaluate shallow groundwater quality. It is expected that the shallow soil borings will be advanced to a depth of approximately 20 feet below ground surface. A Geoprobe Systems stainless steel screenpoint will be used to collect groundwater samples from each of the shallow borings.
- (3) <u>Deep Soil Borings with use of Membrane Interface Probe (MIP)</u> The direct push drilling program will include a series of deep borings and the use of the Geoprobe Systems Membrane Interface Probe (MIP) to assess VOCs in both the saturated and unsaturated zones. It is expected that up to 15 deep borings using the MIP will be advanced at locations identified based on evaluation of the passive soil gas investigation and shallow soil sampling completed as part of component one of this Subtask.

During the direct push drilling program, subsurface soil samples will be collected continuously from each of the soil borings until the target depth is encountered. Each soil sample will be described and logged relative to its geologic character, features, and properties. The soil will be screened visually for evidence of contamination and will be collected for field analysis using a photoionization detector (PID). The field screening along with field observations will be used to select soil samples for subsequent laboratory analysis. If no contamination is detected, the subsurface soil samples for laboratory analysis will either be collected from a low permeability interface or from an area with increased soil moisture. It is not expected that soil samples will be collected during component 3 of the Direct Push Drilling Program (Deep Soil Borings with use of Membrane Interface Probe).

Overall, and based on the field screening, up to 20 soil samples will be collected during the direct push drilling program and submitted to the laboratory for VOC analysis using EPA method 8260B. All soil samples will be sent to an approved laboratory for analysis

and in accordance with the Department Analytical Services Protocol. The selection of subsurface soil materials for laboratory analysis will be made in consultation with the Department field representative.

Following the completion of each direct push soil boring, the consultant will mark the sample location with a survey stake. Each survey stake will include boring identification information that can be used by Department staff during a subsequent high precision GPS survey.

Drill cuttings generated during the direct push drilling program will be drummed in accordance with Subtask 1.6 (Storage and Disposal of Waste).

Subtask 1.5 Subsurface Drilling Program and Monitoring Well Installation

A drilling program with monitoring well installations will be implemented as part Task 1 of this RI/FS to evaluate the overburden stratigraphy; groundwater quality; and groundwater flow patterns. Existing groundwater data along with the results of the previously discussed soil gas investigation (Subtask 1.3) and direct push drilling program (Subtask 1.4) will be used to identify drilling locations and monitoring well installations as part of the subsurface drilling program (Subtask 1.5). It is expected that a total of 6 soil borings will be drilled and subsequently completed as groundwater monitoring wells at the Modock Road Springs site.

During the drilling program, subsurface soil samples will be collected continuously from each of the soil borings until the target depth is encountered. Drill cuttings will be drummed in accordance with Subtask 1.6. Special attention will be given to examining the interfaces/low permeability zones for the presence of dense non-aqueous phase liquids (DNAPL).

Subsurface soil samples will be collected to obtain information on the characteristics of the overburden material and for submittal to a laboratory for further analysis. The soil samples will be described and logged with respect to their geologic character, features, and properties. The soil will be screened visually for evidence of contamination. In addition, samples will be placed in closed containers (e.g., driller jars) and the headspace will be analyzed using a flame or photo ionization detector. All or some part of any subsurface soil interval extracted from a specific soil boring may be collected as a soil sample for laboratory analysis at the discretion of the Department representative. It is expected that up to six additional subsurface soil samples may be collected for laboratory analysis during this drilling program. The soil samples will be sent to an approved laboratory for VOC analysis and in accordance with the NYSDEC Analytical Services Protocol. The selection of subsurface soil materials for laboratory analysis will be made in consultation with the DEC field representative and will be based on:

- 1) Subsurface soil materials that show visual signs of contamination; or
- 2) Subsurface soil materials that cause a sustained response above the measured

background response on a calibrated flame or photo ionization screening instrument; or

#### 3) A combination of these situations.

#### 1.5.1 Monitoring Wells

The exact placement of the monitoring wells will be based upon the information collected during the soil gas investigation, direct push drilling program, and knowledge of the existing distribution of contaminants based on earlier investigation results. It is expected that the shallow monitoring wells will be constructed similar to the construction of the existing monitoring well network. The existing wells are constructed with a 10 to 15 foot screened interval that is entirely within the shallow overburden system. Well depth varies based on location and distance from the Modock Road Springs. Existing well MW-5, located near the Modock Road Springs was installed to a depth of 22.5 feet below ground surface. Existing well MW-10, located approximately 3,000 feet upgradient of the Modock Road Springs was installed to a depth of 90 feet below ground surface. It is expected that the deep wells will be sampled as part of Subtask 2.3). The drilling and installation of monitoring wells will be supervised and documented by a field hydrogeologist according to the procedures described below.

#### 1.5.2 Monitoring Well Installation Method

The drilling program will include the installation of both shallow and deep groundwater monitoring wells. The shallow wells will be approximately 30 to 90 feet deep and screened entirely within the shallow bedrock system. During installation, the overburden will be drilled using 6-1/4 inch inside diameter (I.D.) hollow-stem augers, with continuous split spoon sampling to the top of the underlying confining unit. Alternatively, sonic drilling methodologies may be used for completion of the drilling program. Although the work assignment scope of work outlines that hollow stem auger drilling methods will be used during RI implementation, the actual drilling technique will be selected based on discussions with the State Standby Contractor during the scoping session.

Each monitoring well will be constructed with a ten-foot length of two-inch I.D. threaded schedule 40 PVC flush-joint casing with a ten-foot machine slotted 0.010-inch well screen. The annulus around the well screen will be backfilled with No. 1 Morie sand. The sand pack will extend one to two feet above the well screen. A bentonite seal will be placed above the sand pack to form a minimum two foot seal. Cement/bentonite grout will be placed to within three feet of the ground surface. Each well will have a vented cap and there will be a locking cover. A cement pad will be installed to channel surface water away from the well. A weep hole will be drilled in the protective casing to allow any water between the inner and outer casing to drain. The monitoring well identifications will start with MW-15. Deep monitoring wells will be identified with a "D" that is immediately preceded by the well number (i.e. MW-15D).

## 1.5.3 Well Development

The monitoring wells will be developed no sooner than 24 hours following installation by surging and pumping techniques. Well development will be considered complete when temperature, conductivity, and pH have stabilized and a turbidity of less than 50 NTUs has been achieved. See Subtask 1.6 for a discussion on the disposal of well development water.

#### Subtask 1.6 Storage and Disposal of Waste

The consultant is responsible for the proper storage, handling, and disposal of investigative derived waste (IDW) including personal protective equipment, and solids and liquids generated during the well drilling, well development, and well sampling activities. Liquids generated during well drilling, well development, and well sampling will be placed in drums and properly disposed unless there is no visual or olfactory evidence of contamination and it is known that high concentrations of contaminants do not exist. Excess drill cuttings generated from the installation of monitoring wells will also be drummed and the consultant will arrange for proper disposal. All drummed materials will be clearly labeled as to their contents and origin. All IDW will be managed in accordance with DEC-DER TAGM 4032.

#### Subtask 1.7 Interim Remedial Measure Evaluation

Subtask 1.7 of the Modock Road Springs RI/FS will include a detailed alternatives analysis for the use of a permeable reactive wall as a mechanism to address off-site groundwater contamination as part of an interim remedial measure. The alternatives analysis will conclude with the preparation of a letter report detailing the analysis. The report will include tables to summarize IRM options and associated costs.

#### Task 2 - Site Investigation

The primary focus of this WA is to evaluate existing on-site and off-site conditions, evaluate groundwater flow direction, evaluate the nature and extent of the contamination, evaluate possible human exposure to the contaminants, and develop a remedial approach to address on-site and off-site contamination. The overall WA project will begin with follow-up soil gas investigation and direct push drilling activities to better understand the possible source area/areas on the DLS Sand & Gravel, Inc. property. These Task 2 activities will be based on the results obtained during the completion of Subtasks 1.3, 1.4, and 1.5 above. It is expected that the majority of the direct push soil borings will be installed along the north-side of the DLS Sand & Gravel, Inc. property. Following the direct push drilling program, a series of both on-site and off-site overburden wells will be installed and subsequently sampled. If necessary, an indoor air sampling program will be completed as a follow-up to the indoor air sampling activities completed as part of the IIWA. The following Work Assignment sections provide more detail on the overall scope of the RI/FS.

#### Subtask 2.1 Soil Gas Investigation

If necessary based on the results of the soil gas investigation activities completed as part of Subtask 1.3, a follow-up passive soil gas investigation, using Emflux® samplers, or comparable, will be completed. The passive soil gas investigation will be completed to

primarily identify potential source areas and to characterize the lateral extent of shallow soil contamination.

The soil gas monitoring will be performed according to a pre-defined, evenly-spaced sampling grid along the northern portion of the DLS Sand and Gravel property and the area near monitoring well MW-14. In total, it is expected that approximately 50 passive soil gas samplers will be deployed as part of the Subtask 2.1 passive soil gas investigation.

The vadose zone monitoring will be used to optimize subsequent site characterization activities during implementation of the direct push program and subsurface drilling programs included in Subtasks 2.2 and 2.3. The vadose zone monitoring will be completed using an acceptable passive soil gas methodology and will include the collection of Quality Assurance and Quality Control samples.

Immediately upon deploying the passive soil gas samplers, the consultant will mark the sample location with a survey flag. Each survey flag will include sample identification information that can be used by Department staff during a subsequent high precision global positioning system (GPS) survey.

#### Subtask 2.2 <u>Direct Push/Geoprobe Drilling Program</u>

To expand on site characterization activities completed during Subtask 1.3, 1.4, and 1.5 above, a direct push drilling program will be implemented as part of this RI/FS to evaluate the shallow overburden unit. Similar to the soil gas investigation, it is expected that the majority of the direct push soil borings will be installed in the northern portion of the DLS Sand and Gravel property. It is estimated that a total of approximately 20 follow-up shallow soil borings will be advanced on the DLS Sand and Gravel property as part of Subtask 2.2. It is expected that the shallow soil borings will be advanced to a depth of approximately 10 to 20 feet below ground surface to evaluate shallow soil quality and possible disposal areas.

During the direct push drilling program, subsurface soil samples will be collected continuously from each of the soil borings until the target depth is encountered. Each soil sample will be described and logged relative to its geologic character, features, and properties. The soil will be screened visually for evidence of contamination and will be collected for field analysis using a photoionization detector (PID). The field screening along with field observations will be used to select soil samples for subsequent laboratory analysis. If no contamination is detected, the subsurface soil samples for laboratory analysis will either be collected from a low permeability interface or from an area with increased soil moisture.

Based on the field screening, up to 20 soil samples will be collected during the direct push drilling program and submitted to the laboratory for VOC analysis using EPA method 8260B. All soil samples will be sent to an approved laboratory for analysis and in accordance with the Department Analytical Services Protocol. The selection of

subsurface soil materials for laboratory analysis will be made in consultation with the Department field representative.

Following the completion of each direct push soil boring, the consultant will mark the sample location with a survey stake. Each survey stake will include boring identification information that can be used by Department staff during a subsequent high precision GPS survey.

Drill cuttings generated during the direct push drilling program will be drummed in accordance with Subtask 2.6 (Storage and Disposal of Waste).

### Subtask 2.3 Subsurface Drilling Program

A drilling program will be implemented as part of this RI/FS to evaluate the overburden stratigraphy; groundwater quality; and groundwater flow patterns. The results of the previously discussed soil gas investigation (Subtask 1.3 and 2.1) and direct push drilling program (Subtask 1.4 and 2.2), along with information gathered as part of the Subtask 1.5 (Drilling Program) will be used to identify subsequent drilling locations and monitoring well installations as part of the subsurface drilling program included as part of Subtask 2.3. The drilling program will include both shallow and deep overburden drilling and sampling. It is estimated that a total of 8 borings will be drilled and subsequently completed as groundwater monitoring wells at the Modock Road Springs site. It is expected that 4 of the 8 monitoring wells will be drilled deeper, and paired with a shallow well to form a couplet. These four couplets will be established to evaluate the relationship between the shallow and deep overburden systems.

It is also expected that one to two shallow soil borings will be advanced near the Modock Road Springs and the associated wetland complex. These soil borings will be completed as groundwater monitoring wells to assess the groundwater flow patterns, hydraulic relationship with the wetlands and surface water stream, and the flux of contaminants from the groundwater to the surface water system. It is expected that the soil borings at these locations will be less than 20 feet in depth.

During the drilling program, subsurface soil samples will be collected continuously from each of the soil borings until the target depth is encountered. Drill cuttings will be drummed in accordance with Subtask 2.6. Special attention will be given to examining the interfaces/low permeability zones for the presence of dense non-aqueous phase liquids (DNAPL).

Subsurface soil samples will be collected to obtain information on the characteristics of the overburden material and for submittal to a laboratory for further analysis. The soil samples will be described and logged with respect to their geologic character, features, and properties. The soil will be screened visually for evidence of contamination. In addition, samples will be placed in closed containers (e.g., driller jars) and the headspace will be analyzed using a flame or photo ionization detector. All or some part of any subsurface soil interval extracted from a specific soil boring may be collected as a soil

sample for laboratory analysis at the discretion of the Department representative. It is expected that up to 16 additional subsurface soil samples may be collected for laboratory analysis during this drilling program. The soil samples will be sent to an approved laboratory for VOC analysis and in accordance with the NYSDEC Analytical Services Protocol. The selection of subsurface soil materials for laboratory analysis will be made in consultation with the DEC field representative and will be based on:

- 1) Subsurface soil materials that show visual signs of contamination; or
- 2) Subsurface soil materials that cause a sustained response above the measured background response on a calibrated flame or photo ionization screening instrument; or
- 3) A combination of these situations.

#### 2.3.1 Monitoring Wells

The exact placement of the monitoring wells will be based upon the information collected during the soil gas investigation, direct push drilling program, and knowledge of the existing distribution of contaminants based on earlier investigation results. It is expected that the shallow monitoring wells will be constructed similar to the construction of the existing monitoring well network. However, at four locations, a deep overburden well will be installed as part of a couplet to evaluate the vertical hydraulic gradient and the vertical distribution of contaminants. The existing wells are constructed with a 10 to 15 foot screened interval that is entirely within the shallow overburden system. Well depth varies based on location and distance from the Modock Road Springs. Existing well MW-5, located near the Modock Road Springs, was installed to a depth of 22.5 feet below ground surface. Existing well MW-10, located approximately 3,000 feet upgradient of the Modock Road Springs was installed to a depth of 90 feet below ground surface. It is expected that the deep wells will be constructed with a screened interval beneath a commonly encountered underlying confining unit consisting of fine sand, silt, and clay and above the glacial till deposit. It is anticipated that a total of 5 wells (3 shallow and 2 deep) will be installed on the Syracusa Sand and Gravel property and 3 groundwater monitoring wells (1 shallow and 2 deep) will be installed off of the Syracusa Sand and Gravel property. The drilling and installation of monitoring wells will be supervised and documented by a field hydrogeologist according to the procedures described below.

#### 2.3.2 Monitoring Well Installation Method

The drilling program will include the installation of both shallow and deep groundwater monitoring wells. The shallow wells will be approximately 30 to 90 feet deep and screened entirely within the shallow bedrock system. During installation, the overburden will be drilled using 6-1/4 inch inside diameter (I.D.) hollow-stem augers, with continuous split spoon sampling to the top of the underlying confining unit. Alternatively, sonic drilling methodologies may be used for completion of the drilling program. Although the work assignment scope of work outlines that hollow stem auger

drilling methods will be used during RI implementation, the actual drilling technique will selected based on discussions with the State Standby Contractor during the scoping session (Section 1.1.3).

Each monitoring well will be constructed with a ten-foot length of two-inch I.D. threaded schedule 40 PVC flush-joint casing with a ten-foot machine slotted 0.010-inch well screen. The annulus around the well screen will be backfilled with No. 1 Morie sand. The sand pack will extend one to two feet above the well screen. A bentonite seal will be placed above the sand pack to form a minimum two foot seal. Cement/bentonite grout will be placed to within three feet of the ground surface. Each well will have a vented cap and there will be a locking cover. A cement pad will be installed to channel surface water away from the well. A weep hole will be drilled in the protective casing to allow any water between the inner and outer casing to drain. The monitoring well identifications will start with MW-15. Deep monitoring wells will be identified with a "D" that is immediately preceded by the well number (i.e. MW-15D).

### 2.3.3 Well Development

The monitoring wells will be developed no sooner than 24 hours following installation by surging and pumping techniques. Well development will be considered complete when temperature, conductivity, and pH have stabilized and a turbidity of less than 50 NTUs has been achieved. See Subtask 2.7 for a discussion on the disposal of well development water.

# Subtask 2.4 Groundwater and Surface Water Sampling

The consultant will not be exclusively responsible for the collection of groundwater samples. Groundwater samples will be collected during two separate sampling events by Department staff with support by the consultant. In total, approximately 40 wells, including a network of existing monitoring wells, newly installed monitoring wells as part of the Modock Road Springs RI/FS, and existing monitoring wells located at the Syracusa Sand and Gravel property, will be included in the groundwater sampling program. Groundwater samples will be collected using passive diffusion bags (PDBs) with confirmation conventional sampling techniques being employed at twenty percent of the sampling locations.

In addition to the collection of groundwater samples during the completion of Subtask 2.4, a surface water sample will be collected from the Modock Road Springs and four downstream surface water samples will be collected from the wetland complex and the surface water stream that the springs discharge to.

Groundwater and surface water samples will be analyzed for VOCs by EPA Method 8260B and in accordance with the NYSDEC ASP during both sampling events. Prior to the start of both groundwater sampling events, water levels will be collected from the entire monitoring well network to prepare a groundwater contour map and evaluate groundwater flow patterns.

#### Subtask 2.5 Indoor Air Sampling Program

Follow-up indoor air sampling will be completed as part of the Modock Road Springs RI/FS to further evaluate the migration of vapors into on-site and off-site buildings. The indoor air sampling program will be completed in accordance with the NYSDOH Indoor Air Sampling and Guidance document. Based on the results of the IIWA, it is estimated that vapor intrusion samples will be collected at a total of 15 locations. The overall goal of the indoor air sampling is to evaluate potential human exposure to VOCs known to occur in site soil and groundwater.

At each location, air samples will be collected for laboratory analysis utilizing the TO15 methodology. Air samples will be collected from three locations per sampling point including the basement, first floor, and the subslab environment. An active approach utilizing laboratory certified canisters will be used to evaluate the indoor air and sub-slab soil vapor conditions. The indoor air canisters will be setup during an initial visit, allowed to collect the air samples during a 24 hour period, and then collected at the conclusion of the 24 hour period. Upon collection, the canisters will be sent to the laboratory for analysis.

Prior to initiating the air sampling, the property owners will be contacted through a telephone call and then through a ten-day written notice consistent with NYSDEC TAGM 4053. The Department Project Manager will contact the property owners, discuss the sampling program, and schedule the sampling. The Department Project Manager will provide the consultant with a copy of the correspondence and indoor air sampling schedule.

During the indoor air sampling program, outdoor ambient air samples will be collected. The ambient air samples will be collected at the same time as the indoor air samples and from an evenly spaced location that is representative of outdoor air conditions for the entire sampling area. Quality assurance/quality control samples including duplicates and MS/MSD samples will also be collected during the indoor air monitoring program.

#### Subtask 2.6 Storage and Disposal of Waste

The consultant is responsible for the proper storage, handling, and disposal of investigative derived waste (IDW) including personal protective equipment, and solids and liquids generated during the well drilling, well development, and well sampling activities. Liquids generated during well drilling, well development, and well sampling will be placed in drums and properly disposed unless there is no visual or olfactory evidence of contamination and it is known that high concentrations of contaminants do not exist. Excess drill cuttings generated from the installation of monitoring wells will also be drummed and the consultant will arrange for proper disposal. All drummed materials will be clearly labeled as to their contents and origin. All IDW will be managed in accordance with DEC-DER TAGM 4032.

#### Subtask 2.7 Data Validation/Determination of Usability

The collection and reporting of reliable data is a primary focus of the sampling and analytical activities. Laboratory and field data will be reviewed to determine the limitations, if any, of the data and to assure that the procedures are effective and that the data generated provides sufficient information to achieve the project objectives. The consultant will evaluate the analytical data according to NYSDEC DER Data Usability Summary Report (DUSR) guidelines.

### Subtask 2.8 Site Survey and Basemap Preparation

As part of Subtask 2.8 and as a follow-up to surveying activities completed as part of the IIWA, a site survey will be completed by a licensed survey. The site survey will include monitoring wells installed by the NYSDEC as part of the RI.

A detailed topographic base map of the site and immediate vicinity will be developed. All relevant features of the site and adjacent areas will be plotted. The site map should include all area important features associated with the investigation (i.e., surface water drainage, above and underground storage tanks, buildings, drywells, cesspools). The base map will be used to accurately plot subsequent sampling locations including soil borings, monitoring wells, and all other sample locations. The tax maps will be reviewed and the property lines of the parcels will be plotted on the base map. The location and elevation of each monitoring well must be surveyed by a New York State licensed surveyor. The elevations of all monitoring well casings should be established to within 0.01 feet based on the NGVD. A permanent reference point should be placed in all interior PVC casings to provide a point to collect future groundwater elevation measurements.

With respect to the site survey and base map preparation, the following assumptions have been made:

- The estimated survey area should include the whole site boundary. All elevations will be referenced to the NAVD 88. All horizontal locations will be referenced to the NAD 83.
- Three blueline copies of the site base maps with topography and three blueline copies of the site basemap, without topography, will be submitted to the Department.
- The site map must be provided in AutoCAD, version 12 or higher and ArcMap™ 9.1.

#### Subtask 2.9 Health Exposure Assessment

A "qualitative" health exposure assessment will be performed. The assessment will be designed to identify potential exposure pathways of site contaminants to the general public. If deemed necessary, a "quantitative" assessment may be performed in the FS on contaminants of concern and exposure routes of interest. For budget purposes, it should be assumed that a quantitative assessment will not be performed.

#### Subtask 2.10 Fish & Wildlife Impact Analysis

A Fish and Wildlife Impact Analysis through step II-B is to be performed, in accordance with the New York State Department of Environmental Conservation Division of Fish and Wildlife guidance memorandum entitled "Fish and Wildlife Impact Analysis" dated 10/94. If deemed necessary, the Fish and Wildlife Analysis step III will be added during the FS.

#### Subtask 2.11 Report Preparation

The consultant will prepare a detailed Remedial Investigation Report. The consultant is expected to prepare an initial draft with one complete revision. The report shall also include data gaps, if any, and any need for Interim Remedial Measures (IRMs). The report will include at a minimum:

- Summary of task activities;
- Conceptual site model which includes site operation history, environmental setting, geological description, contamination assessment including a description of the nature and extent of contamination, hydrogeologic model, evaluation of contaminant fate and transport, and the potential public health and environmental concerns;
- Summary tables of physical and analytical results; and
- Conclusions and recommendations.

The findings of the RI must be reduced by the consultant, analyzed, and made available to the Department and NYSDOH for review. These findings will be used to determine if the collection of additional data is required, if a Supplemental RI is necessary, or if sufficient data exists to start the FS.

The consultant will submit three hard copies of the draft report, as well as a copy on disk (WordPerfect 8 or compatible format). Tables and spreadsheets should also be submitted electronically (Microsoft® Excel 2000 or compatible). The final version of the RI Report must include five hard copies and one copy in Portable Document Format (PDF).

#### Subtask 2.12 Public Meetings

The Remedial Investigation/Feasibility Study at the Modock Road Springs site will include participation in one public informational meeting at the conclusion of the RI. The Department will coordinate the meeting and the consultant is expected to present the results of the RI and answer technical questions regarding the methodologies and findings of the RI. The consultant will be expected to provide visual aids to the Department for the meeting. The visual aids may include large site maps on poster boards, data summary sheets, photographs and/or slides of site activities. The consultant will be responsible for incorporating information collected by the public agencies into the appropriate RI and/or FS reports.

#### Task 3 - Preparation of Feasibility Study

The major objectives of the FS will be to support an informed risk management decision regarding which remedy appears to be the most appropriate, cost effective, and protective of public health and the environment. The FS will be conducted in accordance with the most recent versions of the 1988 EPA publication "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (EPA/540/G-89/004). If any source areas were located during the RI, the Consultant will determine/investigate if there is a need to address the source areas and what is the best way to address the source areas. The consultant must conduct the specific subtasks to achieve the following objectives:

### Subtask 3.1 Standards, Criteria and Guidance (SCGs):

SCGs for each contaminant detected and SCGs necessary for evaluation of remedial actions will be identified and compared to existing conditions on the site.

#### Subtask 3.2 Development of Remedial Action Objectives:

The consultant will prepare remedial action objectives (RAO's) for all contaminants of concern and affected media. The consultant is expected to research appropriate guidance and evaluate background analytical results to determine the RAOs. Guidance to evaluate RAO's includes, but is not limited to, NYSDEC draft "Technical Guidance for Site Investigation and Remediation," (DER-10).

### Subtask 3.3 Scoping and the Development of Remedial Alternatives:

A scoping meeting between the Department and the consultant will be held to discuss the remedial alternatives applicable to the site. Based on discussions during this meeting, the consultant will submit a brief letter report with the remedial alternatives to be considered for the site along with the conceptual details of the remedial alternative. This will be reviewed by the Department. As per EPA guidance, the FS should be focused.

#### Subtask 3.4 Detailed Analysis:

The detailed analysis of the remedial alternatives will include evaluation of the following factors:

- Overall protection of human health and the environment;
- Compliance with SCGs:
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility and volume;
- Short-term effectiveness;
- Implementability; and
- · Cost.

## Subtask 3.5 Report Preparation

The FS report will include discussions of each of these evaluation criteria for each of the alternatives (or technologies) being considered. A summary, including a comparative analysis, will also be included in the report. The consultant will recommend a preferred remedy that is protective of public health and the environment, complies to the maximum

extent practicable with SCG's and cleanup objectives, reflects a preference for treatment over simple disposal and is cost effective. The consultant will prepare a conceptual plan for implementing the preferred alternative and will verify its feasibility. The report should include **limited** site background and site characterization discussions as this information will be available in the RI report. The discussions should be limited to only the information necessary to justify the findings of the FS. The report will include a conceptual design of the preferred remedy which includes a detailed engineers cost estimate. The FS report must be stamped by a professional engineer in accordance with the New York State Education Law. The consultant is expected to prepare an initial draft and one revision. The consultant will submit three hard copies of the initial report and five hard copies of the final report along with one copy in PDF.

Subtask 3.6 Proposed Remedial Action Plan (PAP) and Public Meeting
The Department will prepare a PAP which describes the preferred remedy. The
consultant is expected to provide the tables and figures from RI/FS reports to support the
PAP document, and review and comment on an initial draft of the PAP. The Department
will schedule and lead a public meeting to discuss the findings of the FS. As described in
Subtask 2.12, the consultant is expected to attend and present the results of the RI/FS, and
provide assistance to the Department in preparation of visual aids.

Section 3 Estimate of Work Assignment Budget

TASK	DESCRIPTION	LOT (hours)	LABOR COST	OTHER COST (subcontracts/materials)	TOTAL
1	Work Plan & Initial Field Efforts	685	\$65,710	\$79,165	\$144,875
2 .	Site Investigation	1,326	\$86,010	\$132,640	\$218,650
3	Preparation of Feasability Study	250	\$22,500	\$2,000	\$24,500
	TOTAL	2,261	\$174,220	\$213,805	\$388,025

NOTES:

#### Section 4 Period of Performance

The RI/FS shall be completed within 70 weeks (490 days) of the receipt of the work assignment.

## Section 5 Work Plan Development Authorization

The consultant is authorized to spend up to \$144,875 to perform Task 1.

<sup>\*</sup> Completion of Supplemental RI/IRM contingent upon results of Phase I Site Investigation

## Section 6 Project Schedule with Milestones

Description of Activity

Completion of Work Plan

Initiation of Field Work

Completion of Field Work

Completion of Summary Report

Weeks (from Issuance of Work Assignment)

\*13 weeks

16 weeks

55 weeks

\*70 weeks

<sup>\*</sup> Project Milestone requiring performance evaluation

Jason Pelton

To:

Burger, Ralph

Date:

7/13/2007 2:19:13 PM

Subject:

Fwd: RE: Comments on Modock Road MPI WA #4439-9

Ralph:

I have forwarded a copy of the response to your comments by MPI.

Thanks

Jason

Jason Pelton
Project Manager
Remedial Bureau D
Division of Environmental Remediation
NYSDEC
Ph: 402-9815 or 1-888-459-8667

Fax: 402-9819

>>> "Lang, Daniel" <DLang@PIRNIE.com> 7/10/2007 1:47 PM >>> Jason,

Here are our thoughts for your responses to Ralph:

- 1) Ralph is correct. The total STL cost on schedule 2.11 (f-2) should be \$14,875, not \$7,980. This will increase the total WA cost to \$516,738. There was an error in the summation of the costs for each task.
- 2&3) Malcolm Pirnie anticipated these issues and wrote brief memos, indicating why we did not obtain the required number of bids, which are included in Appendix C of the PMWP. Both of these quotes were for specialty techniques that a limited number of companies provide. Beacon's lab analysis is part of their "package", which includes the samplers and the analysis. The extraction from the modules is not a customary lab procedure and is done only by Beacon.
- 4) An outline of the scope of work was provided in the PMWP. A more detailed description of the project scope was included in the RIFS Work Plan.

Daniel C Lang, PHG Malcolm Pirnie, Inc. 43 British American Blvd. Latham, NY 12110 Main (518) 782-2100 Direct (518) 782-2132 Fax (518) 782-0500

----Original Message-----

From: Jason Pelton [mailto:jmpelton@gw.dec.state.ny.us]

Sent: Tuesday, July 10, 2007 11:45 AM To: Lang, Daniel; Flusche, Mark A.

Subject: Fwd: Comments on Modock Road MPI WA #4439-9

Just wanted to forward these along. I will plan on responding, but if you guys have any suggestions, they would be appreciated.

**Thanks** 

Jason

Jason Pelton
Project Manager
Remedial Bureau D
Division of Environmental Remediation
NYSDEC

Ph: 402-9815 or 1-888-459-8667

Fax: 402-9819

>>> Ralph Burger 7/10/2007 11:12 AM >>>

- 1) The costs of analysis for STL Lab. on schedule 2.11 (f-2) do not add up. There appears to be an error.
- 2) The required number of quotes for sonic drilling (5 required) were not obtained. Why are all the different drilling methods required for this project- ie. geoprobe, sonic, & membrane interface probe?
- 3) The required number of quotes for passive soil gas analysis (3 required) were not obtained. Why were new quotes solicited for 8260B analysis as these are already in the standby lab subcontracts for volatile organics in soil & water? Are summa canisters used to collect the samples? We have TO-14 & TO-15 in standby lab subcontracts for air.
- 4) Do you have a copy of the project management work plan? All I have is an outline of the scope of work.

Ralph Burger

To:

Kappeller, Patricia

Date:

7/27/2007 7:38:06 AM

Subject:

Re: Modock Road Springs

Patty, Did they mix up WA#1 \$50,000 with WA#9 WPDCA of \$144,875? Ralph

>>> Patricia Kappeller 7/26/2007 2:09 PM >>> Hi Jason,

I have a quick questions regarding MPI CAP#2 for D004439-1, Modoack Springs Road. MPI is requesting payment in the amount of \$191,720.91 and the only paperwork I have is for the initial IIWA in the amount of \$50,000. Is there an amendment in the works? I approve payment above the initial \$50,000 until the new work plans are approved, sent for routing, and a NTP is signed.

We need the new 2.11 schedules and a cover letter explaining the amendment sent to Ralph Burger who is doing the contract managing. Once it are approved for budget and technical it can be sent for routing and final approval.

If there is more information that I am not aware of please let me know.

Thanks,

Patty

Patricia Kappeller

NYS Department of Environmental Conservation Division of Environmental Remediation Bureau of Program Management 625 Broadway, 12th Floor Albany, NY 12233-7012

518-402-9572(desk) 518-402-9764(bureau) 518-402-9722(fax) From: To: "Nelson, Bruce R." <BNelson@PIRNIE.com>
"Ralph Burger" <reburger@gw.dec.state.ny.us>

Date:

9/4/2007 4:41:23 PM

Subject:

Modock Road Springs RI/FS

Ralph:

I apologize that our response has taken a little time, I just returned from 10 days of vacation. We understand that you had questions concerning solicitation of bids from subcontractors for the Modock Road Springs RI/FS work. Our basis for our selection of technologies and bidding are summarized below.

#### Drilling

Sonic drilling was selected because of the site's geology where running sands had been shown in the past to significantly hinder the ability to drill with more traditional methods such as hollow-stem auger methods or drive and wash. This approach was mutually reached with the DEC technical staff during an early project scoping meeting. We made good-faith efforts to receive 5 bids for this work. We solicited bids from the only four drilling companies we were able to find with sonic drilling capabilities on the east coast and in the Midwest. Several companies with sonic rigs have recently merged which reduced the pool of available drilling companies. We did extensive web research and spoke with several other drillers to confirm this.

#### Passive Soil Gas

Gore and Beacon are the only two companies we know of that produce passive soil gas samplers and provide the associated analytical services. Passive soil gas sampling was used because the NYSDEC work assignment required its use. Passive soil gas sampling has been shown to be a relatively inexpensive way to identify areas where additional investigation is required and therefore reduce costs by focusing future investigations.

Please let me know if you need additional information or if you need to receive this information in a more formal submittal, such as a hard-copy letter.

Thank you,

--Bruce

Bruce R. Nelson, C.P.G.

Senior Associate

Malcolm Pirnie, Inc.

43 British American Blvd.

Latham, NY 12110

(518) 782-2115 (direct)

(518) 782-0500 (fax)

bnelson@pirnie.com

CC:

"Jason Pelton" <jmpelton@gw.dec.state.ny.us>

8/30/67

From:

Ralph Burger

To:

DLang@PIRNIE.com

Subject:

Modock Road Springs WA# 4439-9

Dan, I'm trying to finish my review of the work assignment budget. There are two subcontractors that I am concerned about as there does not appear to be enough quotes to justify the reasonableness of the costs-1) passive soil gas analysis and 2) sonic drilling. If it is estimated to be under \$20,000 3 written responsive quotes are required. If it is estimated to be over \$20,000 5 written responsive quotes are required. You should solicit enough firms to make the required number of responsive quotes. I have heard that these services are somewhat unique and therefore there are a limited number of firms available. This is an argument I have heard many times before and sometimes it justifies a lesser number of quotes and sometimes not. Please provide me with either additional quotes or a technical rationale as to why these services are a must for this project and your assurance that you have made an attempt to obtain quotes from all reasonably available contractors. I have seen passive soil gas on other projects over the years but sonic drilling appears to be new to me. Ralph

"Nelson, Bruce R." <BNelson@PIRNIE.com>

To:

"Ralph Burger" <reburger@gw.dec.state.ny.us>

Date:

8/22/2007 4:06:37 PM

Subject:

Modock Road Springs IIWA Addendum

Ralph:

I spoke with Joe White today concerning the status of the approval of the Modock IIWA Addendum. He indicated that you had several questions concerning bids for the sonic drilling and passive soil gas survey. These are services under the draft Modock RI/FS WA work plan, not the IIWA amendment.

We will be glad to respond to your request on the RI/FS WA work plan too of course. I will be out of the office until September 4th. In my absence if you could please copy Dan Lang (listed above) on any Modock questions he will be able to respond.

Thank you,

--Bruce

Bruce R. Nelson, C.P.G.

Senior Associate

Malcolm Pirnie, Inc.

43 British American Blvd.

Latham, NY 12110

(518) 782-2115 (direct)

(518) 782-0500 (fax)

bnelson@pirnie.com

**CC:** "Joseph White" <ajwhite@gw.dec.state.ny.us>, "Jason Pelton" <jmpelton@gw.dec.state.ny.us>, "Lang, Daniel" <DLang@PIRNIE.com>

Ralph Burger

To:

Nelson, Bruce R.

Subject:

RE: Modock Road Springs, Site #8-35-013, WA D004439-9

Yes. It was kind of voluminous so it will be with the hard copy tomorrow.

>>> "Nelson, Bruce R." <BNelson@PIRNIE.com> 5/1/2007 1:57 PM >>> Ralph:

Thank you. We will bring the signed COI to our meeting tomorrow. In the past the WAs have typically included a description of scope. Should we be expecting this?

Thanks,

--Bruce

----Original Message-----

From: Ralph Burger [mailto:reburger@gw.dec.state.ny.us]

Sent: Tuesday, May 01, 2007 1:28 PM

To: Nelson, Bruce R.

Cc: Joseph White; Brenda Moulhem; Bart Putzig; Edward Belmore; Jason

Pelton; Michael Cruden; Swapan Gupta; Tim Wolosen

Subject: Modock Road Springs, Site #8-35-013, WA D004439-9

Hi Bruce, Lisa is doing some real work having her baby. We should hear from her by tomorrow. I will be substituting for her for the next 3 months as contract manager on both your contracts. Attached is the new Modock work assignment. I know you already sent in a conflict of interest form on the WA #1 but we should have one for this work assignment file also just to keep any auditors happy. Since we have a meeting scheduled for tomorrow I will give you a hard copy of it then. I look forward to working with you. Ralph

Swapan Gupta

To:

Ralph Burger

Date:

5/1/2007 8:35:03 AM

Subject:

Fwd: Re: Modock Road Springs/DLS Sand and Gravel Site No. 835013

FYI.

>>> Swapan Gupta 04/26/07 11:18 AM >>>

CA from Sal. I would like to assign this to MPI ID for the following reasons: PM preference because of familiarity with site and also the need to assign more work to MPI. Other e-mails will follow. I also have an extra hard copy of the WA which I will leave for you so that you can avoid reprinting the entire document.

>>> Michael Cruden 04/26/07 10:40 AM >>> fyi

>>> Sal Ervolina 04/26/07 10:36 AM >>>

I approve the conceptual approval memo for a RI/FS at the Modock Road Springs/DLS Sand and Gravel Site.

>>> Cecelia Artino 4/23/2007 3:46 PM >>> Sal,

Attached is the conceptual approval memo for the above referenced site. The estimated work plan development cost is \$144,875 and the estimated total work assignment is \$388,025.

impetton

Swapan Gupta - Modock Road Springs/DLS Sand and Gravel Site No. 835013

Page 1

V

MPID

LISA LEWIS 4-24

4-26-07

Reserd to

#(173)

From:

Cecelia Artino

To:

Sal Ervolina

Date:

4/23/2007 3:46:47 PM

Subject:

Modock Road Springs/DLS Sand and Gravel Site No. 835013

Sal,

Attached is the conceptual approval memo for the above referenced site. The estimated work plan development cost is \$144,875 and the estimated total work assignment is \$388,025.

**CC:** Bart Putzig; David Finlayson; Donna Weigel; Jason Pelton; Joseph White; Laurie Rizzo; Michael Cruden; Tim Wolosen

## New York State Department of Environmental Conservation

**Division of Environmental Remediation** 

Remedial Bureau D, 12th Floor

625 Broadway, Albany, New York 12233-7013 **Phone:** (518) 402-9818 • **FAX:** (518) 402-9819

Website: www.dec.state.ny.us



Ela Al Behow

#### MEMORANDUM

TO:

Salvatore Ervolina, Assistant Division Director, DER

FROM:

Edward R. Belmore, Director, Remedial Bureau D

DATE:

April 23, 2007

SUBJECT:

Conceptual Approval Memo for Modock Road Springs/DLS Sand and Gravel Site

(HW 8-35-013) Remedial Investigation and Feasibility Study Work Assignment

### Project No., Name and Location:

Modock Road Springs/DLS Sand and Gravel Site (HW 8-35-013) located in the Town of Victor, Ontario County, New York

#### **Program Element:**

Remedial Investigation and Feasibility Study

## **Project Duration:**

70 Weeks

### **Consultant Preference:**

Based on familiarity with the Modock Road Springs Site associated with the implementation of the Immediate Investigation Work Assignment, staff would prefer to continue work at the Modock Road Springs site with Malcolm Pirnie, Inc.

#### **Estimated WA Budget (WPDC & Total):**

Work Plan Development Cost: \$144,875

Total Work Assignment: \$388,025

## **Funding Source:**

State Superfund

## **Brief Project Description:**

The project will involve implementation of a Remedial Investigation/Feasibility Study (RI/FS) at the Modock Road Springs/DLS Sand and Gravel Site. The RI/FS will expand on a preliminary site assessment (PSA) completed at the site in 1995, subsequent investigation activities as part of a Groundwater Investigation completed at the DLS Sand and Gravel, Inc. Property in 2002, and Immediate Investigation Work Assignment (IIWA) activities completed in early 2007. Data collected during previous investigations document the presence of chlorinated volatile organic compounds (CVOCs) including Trichloroethene (TCE), 1,1,1-Trichloroethane (1,1,1-TCA), and Dichloroethene (DCE) in groundwater beneath a residential area in the Town of Victor.

The groundwater contamination was initially discovered in February 1990 during a New York State Department of Health (NYSDOH) initiative to sample small community water supplies across New York State. During this community water supply sampling, the Village of Victor public water supply at the Modock Road Springs was found to contain total VOC concentrations of greater than 200 parts per billion (ppb). Both TCE and 1,1,1-TCA were detected in the spring water at concentrations above the NYSDOH Part 5 drinking water standards of 5 ppb. As a result, the use of the springs as a public water supply ceased and the Village of Victor was connected to the Monroe County Water Authority as a source of supply.

Vapor intrusion sampling completed as part of the IIWA is currently being evaluated, but vapors have been identified in sub-slab samples and one location required installation of a sub-slab depressurization system. Expanded vapor intrusion sampling is being completed and evaluated as part of the IIWA through April 28, 2007. A public meeting to discuss vapor intrusion sampling, domestic water supply sampling, and the overall RI/FS scope will be held in June of 2007.

The primary focus of this WA is to evaluate existing on-site and off-site conditions, evaluate groundwater flow direction, evaluate the nature and extent of the contamination, evaluate possible human exposure to the contaminants, and develop a remedial approach to address on-site and off-site contamination. Due to recent media coverage, specific requests for immediate field activities, the potential for vapor intrusion, and known impacts to groundwater at concentrations exceeding the drinking water standards, field activities have been included as part of Task 1 of this Work Assignment. To allow for follow-up field activities and to expand on information gathered as part of Task 1, similar tasks have been included as Task 2 of this Work Assignment.

ec:

- D. Weigel
- T. Wolosen
- S. Gupta
- L. Rizzo
- D. Finlayson
- A.J. White/J. Pelton
- B. Putzig

From: To: "Nelson, Bruce R." <BNelson@PIRNIE.com>
"Lisa Lewis" <Imlewis@gw.dec.state.ny.us>

Date:

10/4/2007 12:48:37 PM

Subject:

RE: Comments on Modock Road Springs D004439-9 cost tables

Lisa:

Sorry, I was traveling yesterday.

PDFs of the two updated 2.11 sheets that you requested are attached. The revisions did not change the budget.

The per diem rate used in the 2.11s was for Rochester. When making a reservation at the Holiday Inn, they charge us the government rate for Rochester. I believe this is the same rate that Jason gets.

Please let me know if you have any questions.

#### --Bruce

----Original Message-----

From: Lisa Lewis [mailto:lmlewis@gw.dec.state.ny.us]

Sent: Thursday, October 04, 2007 11:41 AM

To: Nelson, Bruce R.

Cc: Jason Pelton; Lang, Daniel

Subject: Fwd: Comments on Modock Road Springs D004439-9 cost tables

#### Bruce-

Just wanted to check on the status of the two Schedule sheets. I know Jason was anxious to get this out on routing...

Lisa

>>> Lisa Lewis 10/2/2007 11:56 AM >>> Hi Bruce-

Sorry for the delay on my part in reviewing this WA. I know you already made a few adjustments for Ralph and answered some questions relating to number of subcontractor quotes. I went over the cost tables and found a couple of things which I don't believe came up before. Hopefully we can sort this out quickly and get this WA on routing for approval.

- 1. On Schedule (b-1), only the hours for Task 2 are listed/computed in the Subtotals and Total Cost rows. Task 1 and 3 Subtotals need to be added in and then the Total Cost for each NSPE level needs to be recalculated. The Total Hours row is correct as is. Total WA Administrative Cost needs to be recalculated. No other pages are affected by these changes.
- 2. On Schedule 2.11(c), where did the Per Diem rate of \$131 come from? According to the GSA site, Ontario county has the basic rates of \$60 lodging and \$39 meals. Even with tax, \$131 seems too high. Since you'd only be reimbursed for actual costs, I'll let this one slide, only to save time adjusting other pages along with this one. Just wanted to point it out and ask where the number came from, and I can use your

response for justification, if needed.

- 3. On Schedule 2.11(g) Supplemental, the information for STL is missing. It needs to be added and the totals adjusted. The first (g) Supplemental is incomplete and unnecessary. Only the one titled CPFF and Unit Price Subcontractors is needed.
- 4. I need some documents in relation to your subcontractors, but I'll send you a separate e-mail so this WA isn't held up. Nothing to do with number of quotes.

If you could send PDFs of corrected Schedules (b-1) and (g) Supplemental, along with an explanation for the increased Per Diem rates, I can hopefully get this sent out today.

And please let me know if there are any questions.

Thanks, Lisa

Lisa M. Lewis
Contract Manager
NYS Dept. of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management
Contracts & Payments Section
625 Broadway, 12th Floor
Albany, NY 12233-7012

Phone: (518) 402-9601 Fax: (518) 402-9722

Email: Imlewis@gw.dec.state.ny.us

CC: "Jason Pelton" <jmpelton@gw.dec.state.ny.us>, "Lang, Daniel" <DLang@PIRNIE.com>

Lisa Lewis

To:

bnelson@pirnie.com 10/2/2007 11:56:12 AM

Date: Subject:

Comments on Modock Road Springs D004439-9 cost tables

Hi Bruce-

Sorry for the delay on my part in reviewing this WA. I know you already made a few adjustments for Ralph and answered some questions relating to number of subcontractor quotes. I went over the cost tables and found a couple of things which I don't believe came up before. Hopefully we can sort this out quickly and get this WA on routing for approval.

- 1. On Schedule (b-1), only the hours for Task 2 are listed/computed in the Subtotals and Total Cost rows. Task 1 and 3 Subtotals need to be added in and then the Total Cost for each NSPE level needs to be recalculated. The Total Hours row is correct as is. Total WA Administrative Cost needs to be recalculated. No other pages are affected by these changes.
- 2. On Schedule 2.11(c), where did the Per Diem rate of \$131 come from? According to the GSA site, Ontario county has the basic rates of \$60 lodging and \$39 meals. Even with tax, \$131 seems too high. Since you'd only be reimbursed for actual costs, I'll let this one slide, only to save time adjusting other pages along with this one. Just wanted to point it out and ask where the number came from, and I can use your response for justification, if needed.
- 3. On Schedule 2.11(g) Supplemental, the information for STL is missing. It needs to be added and the totals adjusted. The first (g) Supplemental is incomplete and unnecessary. Only the one titled CPFF and Unit Price Subcontractors is needed.
- 4. I need some documents in relation to your subcontractors, but I'll send you a separate e-mail so this WA isn't held up. Nothing to do with number of quotes.

If you could send PDFs of corrected Schedules (b-1) and (g) Supplemental, along with an explanation for the increased Per Diem rates, I can hopefully get this sent out today.

And please let me know if there are any questions.

Thanks, Lisa

Lisa M. Lewis
Contract Manager
NYS Dept. of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management
Contracts & Payments Section
625 Broadway, 12th Floor
Albany, NY 12233-7012

Phone: (518) 402-9601 Fax: (518) 402-9722

Email: Imlewis@gw.dec.state.ny.us

CC:

dlang@pirnie.com; Pelton, Jason

Direct Salary Costs [Schedule 2.11(b)]	· ·		\$78,010
Indirect Costs (1.753)		•	\$136,752
Direct Non-Salary Costs [Schedule 2.11(c)(d)]	• •	* .	\$25,059
Subcontract Costs:			
Cost-plus-fixed-fee Subcontracts [Schedule 2.11 (e)]			•
Name of Subcontractor	Services To Be Performed	Sûbcontractor Price	
	0	0 \$0	•
	0	0 \$0	
A. Subtotal Cost-plus-fixed-fee Subcontracts Unit Price Subcontracts [Schedule 2.11(f)]	0		. •
Subtotal Cost-plus-fixed-fee Subcontracts  Unit Price Subcontracts [Schedule 2.11(f)]		\$0 Subcontractor	
Unit Price Subcontracts [Schedule 2.11(f)]  Name of Subcontractor	Services To Be Performed Air Analytical	\$0	
Unit Price Subcontracts [Schedule 2.11(f)]  Name of Subcontractor  A. Laboratory - Chemtech (MBE)  B. Laboratory - STL	Services To Be Performed Air Analytical Soil and GW Analytical	Subcontractor Price \$12,530 \$14,875	
Init Price Subcontracts [Schedule 2.11(f)]  Name of Subcontractor  Laboratory - Chemtech (MBE)  Laboratory - STL  Data Validation - Data Validation Services (WBE)	Services To Be Performed Air Analytical Soil and GW Analytical Data Validation	\$0 Subcontractor Price \$12,530 \$14,875 \$5,885	
Name of Subcontracts  Laboratory - Chemtech (MBE) Laboratory - STL  Data Validation - Data Validation Services (WBE)  Springs Geoprobe - Aztech Technologies (WBE)	Services To Be Performed  Air Analytical Soil and GW Analytical Data Validation Geoprobe Drilling	\$0 Subcontractor Price \$12,530 \$14,875 \$5,885 \$6,206	
Name of Subcontractor  Laboratory - Chemtech (MBE)  Laboratory - STL  Data Validation - Data Validation Services (WBE)  Springs Geoprobe - Aztech Technologies (WBE)  Soil Gas Analysis - Beacon Environmental Services Inc.	Services To Be Performed  Air Analytical Soil and GW Analytical Data Validation Geoprobe Drilling Soil Gas Analysis	\$0  Subcontractor Price \$12,530 \$14,875 \$5,885 \$6,206 \$28,054	
Name of Subcontracts [Schedule 2.11(f)]  Name of Subcontractor  Laboratory - Chemtech (MBE) Laboratory - STL  Data Validation - Data Validation Services (WBE) Springs Geoprobe - Aztech Technologies (WBE) Soil Gas Analysis - Beacon Environmental Services Inc. Sonic Drilling - Stearns Drilling	Services To Be Performed  Air Analytical Soil and GW Analytical Data Validation Geoprobe Drilling Soil Gas Analysis Sonic Drilling	\$0  Subcontractor Price \$12,530 \$14,875 \$5,885 \$6,206 \$28,054 \$119,010	
Name of Subcontracts [Schedule 2.11(f)]  Name of Subcontractor  Laboratory - Chemtech (MBE)  Laboratory - STL  Data Validation - Data Validation Services (WBE)  Springs Geoprobe - Aztech Technologies (WBE)  Soil Gas Analysis - Beacon Environmental Services Inc.  Sonic Drilling - Steams Drilling  MIP Drilling - Zebra Environmental	Services To Be Performed  Air Analytical Soil and GW Analytical Data Validation Geoprobe Drilling Soil Gas Analysis Sonic Drilling MIP Drilling	\$0  Subcontractor Price \$12,530 \$14,875 \$5,885 \$6,206 \$28,054 \$119,010 \$26,350	
Name of Subcontracts [Schedule 2.11(f)]  Name of Subcontractor  Laboratory - Chemtech (MBE)  Laboratory - STL  Data Validation - Data Validation Services (WBE)  Springs Geoprobe - Aztech Technologies (WBE)  Soil Gas Analysis - Beacon Environmental Services Inc.  Sonic Drilling - Stearns Drilling  MIP Drilling - Zebra Environmental  IDW - EWMI	Services To Be Performed  Air Analytical Soil and GW Analytical Data Validation Geoprobe Drilling Soil Gas Analysis Sonic Drilling MIP Drilling IDW Disposal	\$0  Subcontractor Price \$12,530 \$14,875 \$5,885 \$6,206 \$28,054 \$119,010 \$26,350 \$3,100	
Name of Subcontracts [Schedule 2.11(f)]  Name of Subcontractor  Laboratory - Chemtech (MBE) Laboratory - STL  Data Validation - Data Validation Services (WBE) Springs Geoprobe - Aztech Technologies (WBE) Soil Gas Analysis - Beacon Environmental Services Inc. Sonic Drilling - Stearns Drilling MIP Drilling - Zebra Environmental IDW - EWMI DLS Property Geoprobe - Geologic NY (WBE)	Services To Be Performed  Air Analytical Soil and GW Analytical Data Validation Geoprobe Drilling Soil Gas Analysis Sonic Drilling MIP Drilling IDW Disposal Geoprobe Drilling	\$0  Subcontractor Price \$12,530 \$14,875 \$5,885 \$6,206 \$28,054 \$119,010 \$26,350 \$3,100 \$19,200	
Subtotal Cost-plus-fixed-fee Subcontracts  Unit Price Subcontracts [Schedule 2.11(f)]	Services To Be Performed  Air Analytical Soil and GW Analytical Data Validation Geoprobe Drilling Soil Gas Analysis Sonic Drilling MIP Drilling IDW Disposal	\$0  Subcontractor Price \$12,530 \$14,875 \$5,885 \$6,206 \$28,054 \$119,010 \$26,350 \$3,100	

\$520,57

9. Total Work Assignment Price (lines 1+2+3+7+8)

8. Fixed Fee

### SCHEDULE 2.11 (b) - Tasks 1 through 4

# SUMMARY TOTAL OF DIRECT LABOR HOURS D-004439-9A Modock Road Springs

												**************************************
	NSPE Labor Classification	9	8	7	6	5	4	3	2	. 1	Tech	
	Average 2007 Rate	\$65.98	\$65.98	\$55.81	\$42.30	\$36.01	\$32.84	\$28.14	\$24.56	\$20.10	\$13.69	
	Average 2008 Rate	\$67.96	\$67.96	\$57.48	\$43.57	\$37.09	\$33.83	\$28.98	\$25.30	\$20.70	\$14.10	
	Average 2009 Rate	\$70.00	\$70.00	\$59.20	\$44.88	\$38.20	\$34.84	\$29.85	\$26.06	\$21.32	\$14.52	,
Task#	Task Name			Total D	irect Labor H	ours by Task	for each NSP	E Labor Classi	fication			Total Direct Labor Hours Budgeted
Task 1	Work Plan Preparation	5	51	66	. 2	0	8	240	275	2 .	130	779
Task 2	Site Investigation	2	91	114	0	8	0	465	391	20	370	1,461
Task 3	Feasibility Study	8	49	65	.0	0	0	145	58	20	0	345
	Subtotals:											TOTALS:
	2007 hours:	6.	126	156	2	4	8	555	546	22	430	1,855
	2007 costs:	\$395.88	\$8,313.48	\$8,706.36	\$84.60	\$144.04	\$262.72	\$15,617.70	\$13,409.76	\$442.20	\$5,886.70	\$53,263.44
	2008 hours:	9	65	89	0	4	0 .	295	178	20	70	730
	2008 costs:	\$611.64	\$4,417.40	\$5,115.72	\$0.00	\$148.36	\$0.00	\$8,549.10	\$4,503.40	\$414.00	\$987.00	\$24,746.62
	2009 hours:	0	Q	0	0	0	0	0	0,	0	0	0
_	2009 costs:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total W	ork Assignment Hours	15	191	245	2	. 8	8	850	724	42	500	2,585
Total C	ost for Each NSPE Level	\$1,007.52	\$12,730.88	\$13,822.08	\$84.60	\$292.40	\$262.72	\$24,166.80	\$17,913.16	\$856.20	\$6,873.70	
Total W	ork Assignment Direct Labor Cost	./					\					\$78,010.06

### SCHEDULE 2.11 (b) - Tasks 1 through 3

## SUMMARY TOTAL OF DIRECT LABOR HOURS D-004439-9A Modock Road Springs

									e reduce of							
							[WOR]	KSHEET	- Not to	be subm	itted]					
Γask #	NSPE Labor Classification Task Name				9	8	7	6	5	4	3	2	1	Tech	Total No. Direct Labor Hours Budgeted	Direct Labor Cost
Task I	Work Plan Preparation				5	51	66	2	0	8	240	275	2	130	779	\$23,053.16
				2007	5	51	66	2	0	8	240	275	2 -	130	779	\$23,053.16
				2008	0	0	0	0	0	0	0	0	0	0	0	\$0.00
				2009	0	0	0	0	0	0	0	0	0	0	0	\$0.00
Task 2	Site Investigation	•			2	. 91	114	0	8	0	465	391	20	370	1,461	\$41,263,48
				2007	1	75	90	0	4	. 0	315	271	20	300	1,076	\$30,210.28
				2008	1	16	24	0	4	0	150	120	0	70	385	\$11,053.20
				2009	0	0	0	0	0	0	0	0	0	0	0	\$0.00
Task 3	Feasibility Study				8	49	65	0	0	. 0	145	58	20	0	345	\$13,693.42
				2007	0	0 .	0	0	0	0	0	0	0	0	0	\$0.00
<del></del>				2008	. 8	49	65	0	0	0	145	58	20	0	345	\$13,693.42
				2009	0	0	0	0	0	0	0	0	0	0	0 ·	\$0.00
		Subtotal	2007	Hours	6	126	156	2	4	8	555	546	22	430	1,855	
	5	Subtotal	2008	Hours	9	65	89	0	4	0	295	178	. 20	70	730	
		Subtotal	2009	Hours	0	0	0	0	0	0	0	0	0	0	0 -	(1) (1) (A) (A) (A)
Total ho	ours				15	191	245	2	8	8	850	724	42	500	2,585	\$78,010.06
		Average	2007	Rate	\$65.98	\$65.98	\$55.81	\$42.30	\$36.01	\$32.84	\$28.14	\$24.56	\$20.10	\$13.69		\$53,263.44
	1	Average	2008	Rate	\$67.96	\$67.96	\$57.48	\$43.57	\$37.09	\$33.83	\$28.98	\$25.30	\$20.70	\$14.10		\$24,746.62
		Average	2009	Rate	\$70.00	\$70.00	\$59.20	\$44.88	\$38.20	\$34.84	\$29.85	\$26.06	\$21.32	\$14.52		\$0.00
Total Di	irect Labor Cost							•								\$78,010.06

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## SCHEDULE 2.11 (b-1) - Tasks 1 through 4

### SUMMARY TOTAL OF DIRECT ADMINISTRATIVE LABOR HOURS

D-004439-9A Modock Road Springs

NSPE Labor Classification	9	8	7	6	5	4	3	2	1	
· Average 2007 Rate	\$65.98	\$65.98	\$55.81	\$42.30	\$36.01	\$32.84	\$28.14	\$24.56	\$20.10	
TASK		Total D	irect Admin	istrative Hou	rs by Task f	or each NSPE	E Labor Cla	ssification		Total Direct Administrative Hours
Task 1	0	7	0	2	0	8	0	5	2	24
Task 2	0	35	0	0	0	0	0	- 51	20	106
Task 3	0	9	0	0	. 0	0	0	8	10	27
Subtotals:										TOTALS:
2007 Task 1 Costs	\$0.00	\$461.86	\$0.00	\$84.60	\$0.00	\$262.72	\$0.00	\$122.80	\$40.20	\$972.18
2007 Task 2 Costs	\$0.00	\$2,309.30	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,252.56	\$402.00	\$3,963.86
2007 Task 3 Costs	\$0.00	\$593.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$196.48	\$201.00	\$991.30
2007 Costs .	\$0.00	\$3,364.98	\$0.00	\$84.60	\$0.00	\$262.72	\$0.00	\$1,571.84	\$643.20	\$5,927.34
Total Hours	0	51	0	2	0	8	0	64	32	157
Total Cost (NSPE Level)	\$0.00	\$3,364.98	\$0.00	\$84.60	\$0.00	\$262.72	\$0.00	\$1,571.84	\$643.20	
Total Work Assignment Dire	ect Admini	strative Cost				<u> </u>				\$5,927.34

Engineer/Contract Number: Malcolm Pirnie / D-004439

Project Name:

Modock Road Springs

Work Assignment Number:

<u>WA-9A</u>

## DETAILED BREAKDOWN OF

Date Prepared:

10/11/2007

#### DIRECT ADMINISTRATIVE LABOR HOURS BUDGETED ON SCHEDULE 2-11(b-1)

[WORKSHEET - to be sent with Work Plan, but separately]

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ADMIN.				Cor				rest				•	Sc				ирро		ng.							t Pro	_	s				P	R	epo	Monti	Upd	ate	ct		I		М	BE/	wB	ΕA	ctiv	/itie:	3				Pro			(anag		ent		
NSPE Level	,	9	8	,	6	heck 5		,	Ţ,		T	ļ	8	Ţ	6 I	nen 5	Latio	3	2	,	ļ,	Ţ	В	,	6	/iew	\$ 4	3	2	-	9	8	,	ogre 6	5	4	Jule	Ţ		T,	,	8	7	6	5	4	3	2	<u> </u>	,	T.	Ι,	T	T	iews	T	,	2	-
Task 1		T									Ī		2		2		8						ı	T	Ī				1			١								I	T		Ţ								,				Ι	Ţ			
Task 2																							6						4			6						1				2						2		L	18				$\perp$				
Task 3																							2						1			2										1						L			4				┙	$\perp$			
Subtotal	ď	٥	0	0	0	0	0	0	0	, ,	,	0	2	0	2	0	8	0	0	ď		,	9	٥	0	0	Đ	0	6	0	0	9	0	0	0	0	,	,	6 0	,	0	2	0	0	0	0	0	2	0	0	24		, [	a	0 0	٥	D	0	0
TOTAL						0										12										15									15	-									4									2	4				

PROJECT NAME:

MPI PROJECT #:

ENGINEER: MALCOLM PIRNIE, INC

#### SCHEDULE 2.11(g)

DATE PREPARED:

11-Oct-07

NYSDEC CONTRACT/WA #:

D-004439-9A Modock Road Springs

MONTHLY COST CONTROL REPORT SUMMARY OF FISCAL INFORMATION

BILLING PERIOD: 00/00/00 - 00/00/00 MPI STATEMENT #:

NYSDEC TASK #/NAME:

0266361

3 - Feasibility Study

DEC VOUCHER #:

% of BUDGET COMPLETE:	0%						
EXPENDITURE CATEGORY	A COSTS CLAIMED THIS PERIOD (CAP #n-month)	B PAID TO DATE (thru CAP #n-month)	C TOTAL COSTS INCURRED TO DATE (A + B)	D ESTIMATED COSTS TO COMPLETION (F-C)	E ESTIMATED TOTAL CONTRACT PRICE (A+B+D)	F APPROVED BUDGET (Date)	G ESTIMATED UNDER/OVER (F-E)
1. DIRECT SALARY COST						\$13,693	
ta. INDIRECT COST - 1.753 %	-					\$24,005	
2. SUBTOTAL: Billabe Labor Cost (1+la)						\$37,698	
2a. OVER-TIME SALARY						\$0	
3. SUBTOTAL: Direct Salary, Indirect	!					\$37,698	
Cost and Over-time Cost (2+2a)	•		· .				
4. TRAVEL & SUBSISTENCE						\$1,049	
5. OTHER NON-SALARY COST						\$100	
6. SUBTOTAL: Direct		,				\$1,149	
Non-Salary Cost (4+5)					i .		
7. SUBCONTRACTORS						\$0	
Management Fee included above			٠			\$0	
8. TOTAL CONTRACT COST (3+6+7)						\$38,847	
9. FIXED FEE - 10.0 %						\$3,770	
10. TOTAL CONTRACT PRICE (8+9)						\$42,617	

	·			
PROJECT MANAGER ENGINEER		· · · · · · · · · · · · · · · · · · ·	DATE	
PRUJECT MANAGER ENGINEER				

**Engineer/Contract Number:** 

Malcolm Pirnie / D-004439

**Project Name:** 

Modock Road Springs

Work Assignment Number:

<u>WA-9A</u>

Date Prepared:

10/11/2007

#### DETAILED BREAKDOWN OF

### DIRECT ADMINISTRATIVE LABOR HOURS BUDGETED ON SCHEDULE 2-11(b-1)

[WORKSHEET - to be sent with Work Plan, but separately]

	Γ						€.4	LP.	PR	EP#	RA.	non	N			_				Т						MI	SCE	LL/	NE	ous	;						I	-		W	ord F	Proce	essin	ıg							-	то	TAL				
ADMIN, TASKS				repa:								c	)ven	see (	CAP	Prep	arati	ion				N	SPE	E Lis	t Up	dates	3				Eq			Use	and					Rep		and Prepa	arati	ion									AD!				
NSPE Level	9	.8		, ,		5	4	3	2	ı	9	8	7	6	5	4	3	2		Ţ	, [	8 7		, .	4	,	,		,	8	,	6	5	4	3	2	-	9	8	7	6	5	4	3	2			9		8	7	6	5	4	3	2	
Task I								$\prod$	3			ŧ						Γ	I	I		Ι	I	I	Γ		I														Ţ							. 0		7	_ 0	2	0	. 8	0	5	
Task 2									40			2				L					L	<u>.</u>	$\perp$	1			١.		L	L	L		<u> </u>			Ш			1	1	_		L	L		20	0	٥	3	5	0	 ٥	٥	0	0	51	:
Task 3									6			ı							L													L							٠							Į,	,	0		٩	0	0	0	0	0	8	
Subtotal	0	0	,	١	,	0	0	0	49	0	0	4	0	0	ĺ	0	0	0		0	,	1 1	, ,	, ,	, (	0	,	1		٥	0	0	٥	0	o	0	0	0	0	0	٥	0	0	٥	0	33	2	O	5	1	0	2	٥	8	0	64	:
TOTAL						49										1			i						2								0									32											157				

## DETAILED BREAKDOWN OF DIRECT NON-SALARY COSTS

D-004439-9A

Modock Road Springs

[WORKSHEET - to be submitted with Work Plan, but separately]

WORKSHEET -	to be sublimited with	, work I lall, but	schai ately	
	Maximum	Estimated		Total
	Reimbursement	Number	Estimated	Estimated
Item	Rate	of Units	Cost	Cost
Task 1			Work P	lan Preparation
Travel & Subsistence				
1 Mileage (2007)	\$0.485 /mile	4,500 miles	\$2,182.50	
2 Subsistence	At Cost	At Cost	\$0.00	
3 Per diem (full day)	\$131 /day	15 days	\$1,965.00	
4 Per Diem (1st day & lodging)	\$120 /day	20 days	\$2,400.00	
5 Per Diem (last day & 75% meals)	\$33 /day	20 days	\$660,00	\$7,207.50
Other Direct Costs		7		
1 Reproduction	\$0.06 /page	0 copies	\$0.00	
2 Mail	At Cost	At Cost	\$500.00	
3 Communication	At Cost	At Cost	\$0.00	\$500.00
		TOTAL -	Task 1	<b>\$7,</b> 707.50
Task 2			Si	te Investigation
Travel & Subsistence				
1 Mileage (2007)	\$0.485 /mile	4,500 miles	\$2,182.50	
2 Subsistence	At Cost	At Cost	\$0.00	•
3 Per diem (full day)	\$131 /day	15 days	\$1,965.00	
4 Per Diem (1st day & lodging)	\$120 /day	20 days	\$2,400.00	•
5 Per Diem (last day & 75% meals)	\$33 /day	20 days	\$6 <u>60.00</u>	\$7,207.50
Other Direct Costs				
1 Reproduction	\$0.06 /page	0 copies	\$0.00	
2 Mail	At Cost	At Cost	\$1,000.00	
3 Communication	At Cost	At Cost	\$0.00	\$1,000.00
		TOTAL -	T-1-2	\$8,207.50

Task 3			Fe	asibility Study
Travel & Subsistence			·	
1 Mileage (2007)	\$0.485 /mile	900 miles	\$436.50	
2 Subsistence	At Cost	At Cost	\$0.00	•
3 Per Diem (full day)	\$131 /day	0 days	\$0.00	
3 Per Diem (first day & loging)	\$120 /day	4 days	\$480.00	
3 Per Diem (last day & 75% meals)	\$33 /day	4 days	\$132.00	\$1,048.50
Other Direct Costs				
1 Reproduction	\$0.06 /page	0 copies	\$0.00	
2 Mail	At Cost	At Cost	\$100.00	
3 Communication	At Cost	At Cost	\$0.00	\$100.00
		TOTAL - '	Task 3	\$1,148.50

moment in the man	 
TOTAL - All Tasks	\$17,064.00
ITOTAL - All Tasks	



## Schedule 2.11 (c)

## DIRECT NON-SALARY COSTS

D-004439-9A Modock Road Springs

		·		
	Maximum	Estimated		Total
·	Reimbursement	Number	Estimated	Estimated
Item	Rate	of Units_	Cost	Cost
In-house				
Mail	At Cost	At Cost	\$1,600.00	\$1,600.00
Miscellaneous				
Per Diem (full day)	\$131.00 /day	30 days	\$3,930.00	
Per Diem (first day & loging)	\$120.00 /day	44 days	\$5,280.00	
Per Diem (last day & 75% meals)	\$33.00 /day	44 days	\$1,452.00	
Mileage(2007)	\$0.485 /mile	9,900 miles	\$4,801.50	\$15,463.50
TOTAL				\$17,064.00

## **Shedule 2.11 (d)**

## SUMMARY OF EQUIPMENT ACTIVITY D-004439-9A

D-004439-9A Modock Road Springs

SCHEDULE	Task 1	Task 2	Task 3	Task 4	Total Budgeted Cos
Schedule 2.11(d)1 - Department Purchased Equipment	\$0	\$0	\$0	\$0	\$0
Schedule 2.11(d)2 - Malcolm Pirnie Owned	\$897	\$1,229	.\$0	\$0	\$2,125
Schedule 2.11(d)3 - Rented Equipment	\$0	\$1,740	\$0	\$0	\$1,740
Schedule 2.11(d)4 - Site Dedicated Equipment	\$0	\$0	\$0	\$0	\$0
Schedule 2.11(d)5 - Consumable Supplies	\$1,440	\$2,690	\$0	\$0	\$4,130
TOTAL	\$2,337	\$5,659	\$0	<b>\$0</b>	\$7,995

## **EQUIPMENT PURCHASED UNDER THE CONTRACT**

D-004439-9A

Modock Road Springs

[WORKSHEET - to be submitted with Work Plan, but separately]

Item	Estimated Purchase Price	O&M Rate	Estimated Number	Estimated Usage Cost
	}		1	

Total - All Tasks

\$0.00

## MAXIMUM REIMBURSEMENT RATES - CONSULTANT OWNED EQUIPMENT

D-004439-9A

Modock Road Springs

Item	O&M Rate	Estimated Usage	Estimated Usage Cost
Photoionization Detector (Task 1)	\$45 /day	15 days	\$675.00
Peristaltic Pump (Task 1)	\$15 /day	0 days	\$0.00
Low Value Equipment (Task 1)	\$0.80 /person/ field hour	277 hours	\$221.60
Task 1 Total			\$896.60
Photoionization Detector (Task 2)	\$45 /day	20 days	\$900.00
Peristaltic Pump (Task 2)	\$15 /day	0 days	\$0.00
Low Value Equipment (Task 2)	\$0.80 /person/ field hour	411 hours	\$328.80
Task 2 Total			\$1,228.80
Low Value Equipment (Task 3)	\$0.80 /person/ field hour	0 hours	\$0.00
Task 3 Total		· · · · · · · · · · · · · · · · · · ·	\$0.00
Total All Tasks			\$2,125.40

## MAXIMUM REIMBURSEMENT RATES - VENDER RENTED EQUIPMENT\*

D-004439-9A Modock Road Springs

Item	Unit Price	Quantity	Total Budgeted Cost	
ppbRae (Task 2)	\$350.00 /week	4 week	\$1,400.00	
Horiba U-10 (Task 2)	\$170.00 /week	2 week	\$340.00	
	\$0.00 /lump sum	0 lump sum	\$0.00	
Total			\$1,740.00	

<sup>\*</sup> Reimbursement will be paid at the actual receipted rental cost

## MAXIMUM REIMBURSEMENT RATES - SITE-DEDICATED EQUIPMENT

D-004439-9A

Modock Road Springs

Item		Item Unit Price		Total Estimated Cost
		·		\$0.00
				\$0.00
				\$0.00
Total				\$0.00

### DETAILED BREAKDOWN OF CONSUMABLE SUPPLIES\*

D-004439-9A Modock Road Springs

Item	Unit Price	Quantity	Total  Budgeted Cost
Task 1	<u> </u>		
Miscellaneous Supplies (Up to \$1,000 total)**	\$200.00 Lump Sum	1 Lump Sum	\$200.00
Aerial Photographs	\$290.00 Lump Sum	1 Lump Sum	\$290.00
PPE Level D	\$19.00 /man - day	50 /man - day	\$950.00
Total - Task 1			\$1,440.00
Task 2			
Miscellaneous Supplies (Up to \$1,000 total)**	\$600.00 Lump Sum	1 Lump Sum	\$600.00
Passive Diffusion Bags	\$28.50 /bag	40 bags	\$1,140.00
PPE Level D	\$19.00 /man - day	50 /man - day	\$950.00
Total - Task 2			\$2,690.00
Task 3			
Miscellaneous Supplies (Up to \$1,000 total)**	\$200.00 Lump Sum	0 Lump Sum	\$0.00
Total - Task 3	·		\$0.00
TOTAL			\$4,130.00

\* Each item costing over \$100 should be identified on a separate line.

Note: Consumable supplies such as gas, diesel fuel, oil, film, stakes, ice, distilled water, rope shall be direct billed with appropriate receipts.

#### Schedule 2.11 (e)

# SUMMARY OF COST-PLUS-FIXED-FEE SUBCONTRACTORS D-004439-9A Modock Road Springs

-	Services To			Subcontract		
Item	Be Performed			Price	<u> </u>	•
		Task I	Task 2	Task 3	Task 4	Total
1.		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2.	•	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
3.		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SUBTOTAL		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Management Fee						
1.		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2.		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
3.	·	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MANAGEMENT FEE SUBTOTAL		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TOTAL		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

#### Schedule 2.11 (f)

## SUMMARY OF UNIT PRICE SUBCONTRACTORS D-004439-9A Modock Road Springs

1tem	Services To  1tem Be Performed						Management Fee (5%)			
		Task 1	Task 2	Task 3	Total	Task 1	Task 2	Task 3	Total	
Laboratory - Chemtech (MBE)	Air Analytical	\$0.00	\$12,530.00	\$0.00	\$12,530.00	\$0.00	\$627.00	\$0.00	\$627.00	
Laboratory - STL	Soil and GW Analytical	\$6,265.00	\$8,610.00	\$0.00	\$14.875.00	\$313.00	\$431.00	\$0.00	\$744.00	
Data Validation - Data Validation Services (WBE)	Data Validation	\$1,760.00	\$4,125.00	\$0.00	\$5,885.00	\$88.00	\$206.00	\$0.00	\$294.00	
Springs Geoprobe - Aztech Technologies (WBE)	Geoprobe Drilling	\$6,206.00	\$0.00	\$0.00	\$6,206.00	\$310.00	\$0.00	\$0.00	\$310.00	
Soil Gas Analysis - Beacon Environmental Services Inc.	Soil Gas Analysis	\$16,900.00	\$11,154.00	\$0.00	\$28,054.00	\$845.00	\$558.00	\$0.00	\$1,403.00	
Sonic Drilling - Steams Drilling	Sonic Drilling	\$54,130.00	\$64,880.00	\$0.00	\$119,010.00	\$2,706.50	\$3,244.00	\$0.00	\$5,950.50	
MIP Drilling - Zebra Environmental	MIP Drilling	\$26,350.00	\$0.00	\$0.00	\$26,350.00	\$1,317.50	\$0.00	\$0.00	\$1,317.50	
IDW - EWMI	IDW Disposal	\$0.00	\$3,100.00	\$0.00	\$3,100.00	\$0.00	\$0.00	\$0.00	\$0.00	
DLS Property Geoprobe - Geologic NY (WBE)	Geoprobe Drilling	\$9,600.00	\$9,600.00	\$0.00	\$19,200.00	\$480.00	\$480.00	\$0.00	\$960.00	
0. Survey - Om P Papli (MBE)	Survey	\$0.00	\$3,688.00	\$0.00	\$3,688.00	\$0.00	\$184.00	\$0.00	\$184.00	
Larsen Engineers- Field Crew (MBE)	Field Work Assistance	\$0.00	\$8,180.00	\$0.00	\$8,180.00	\$0.00	\$409.00	\$0.00	\$409.00	
TOTAL		\$121,211.00	\$125,867.00	\$0.00	\$247,078.00	\$6,060.00	\$6,139.00	\$0.00	\$12,199.0	

## Table 2.11 (f-1)

## DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A

Modock Road Springs

## Laboratory - Chemtech (MBE)

Task	Parameter	Method	Matrix	No. of Tests	Unit Rate (\$)	(1)	Total (\$)	
Task 1	voc	TO-15	Indoor, Ambient Air, & Soil Vapor	0	179.00		\$0.00	
SUTO	TAL - Task 1						\$0.00	
MANAGEMENT FEE (TASK 1)								
SUBTO	OTAL - Task 1 (INCLUI	DING MANAGEM	IENT FEE)				\$0.00	
Task 2	voc	TO-15	Indoor, Ambient Air, & Soil Vapor	70	179.00	·	\$12,530.00	
SUTOTAL - Task 2								
MANAGEMENT FEE (TASK 2)								
SUBTO	OTAL - Task 2 (INCLUI	ING MANAGEM	ENT FEE)				\$13,157.00	
TOTAL	TOTAL FOR ALL TASKS (INCLUDING MANAGEMENT FEE)							

Note: These costs assume a standard turn around time.

same

### Table 2.11 (f-2)

## DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A

Modock Road Springs

### Laboratory - STL

Task	Parameter	Method	Matrix	No. of Tests	Unit Rate (\$)	Total
Task 1	VOC	8260B	Soil	54	70.00	\$3,780.00
Task 1	VOC (2-Day Turn)	8260B	Soil	6	87.50	\$525.00
Task l	VOC	8260B	Groundwater	28	70.00	\$1,960.00
SUTOTAL -	Task 1	==-				\$6,265.00
MANAGEM	\$313.00					
SUBTOTAL	- Task 1 (INCLUDING M.	ANAGEMENT I	TEE)			\$6,578.00
Task 2	VOC	8260B	Soil	60	70.00	\$4,200.00
Task 2	voc	8260B	Groundwater	63	70.00	\$4,410.00
SUTOTAL -	Task 2					\$8,610.00
MANAGEM	\$431.00					
SUBTOTAL	- Task 2 (INCLUDING MA	ANAGEMENT I	EE)			\$9,041.00
TOTAL FOR	\$15,619.00					

Note: Unless noted, these costs assume a standard turn around time.

Note: Maintenance fee assessed because total subcontract is greater than \$10,000.

**ENGINEER:** 

MALCOLM PIRNIE, INC

SCHEDULE 2.11 (g) - Supplemental

DATE PREPARED:

11-Oct-07

**NYSDEC CONTRACT#:** 

D-004439

SUBCONTRACTOR COST CONTROL REPORT

BILLING PERIOD: mm/dd/yy - mm/dd/yy

NYSDEC WA #: MPI PROJECT #: WA-9A

SUMMARY OF FISCAL INFORMATION

MPI STATEMENT #:

PROJECT NAME:

0266361 Modock Road Springs

**Unit Price Subcontractors** 

DEC VOUCHER #:

n

	Α .	В	С	D	Ē	F	G	Н	1
• .	SUB	SUBCONTRACTOR COSTS		MANAGEMENT FEE		i i			
SUBCONTRACT	CURRENT COSTS,	PAID	TOTAL COSTS		MNGT. FEE	FEE		FEE	TOTAL COSTS
NAME	INCLUDES	TO.	TO DATE	APPROVED	BUDGET	THIS	PENDING	PAID	TO DATE
1. Laboratory - Chemtech (MBE)	RESUBMITTALS	DATE	(A + B)	BUDGET \$12,530.00	\$627.00	PERIOD,	FEES	TO DATE	(C + F + H)
Air Analytical				\$12,530.00	3027.00				
2. Laboratory - STL				\$14,875.00	\$744.00				
Soil and GW Analytical							1		
Data Validation - Data Validation Services (WBE)     Data Validation				\$5,885.00	\$294.00				
Springs Geoprobe - Aztech Technologies (WBE)     Geoprobe Drilling				\$6,206.00	\$310.00				
Soil Gas Analysis - Beacon Environmental Services Inc.     Soil Gas Analysis		.•		\$28,054.00	\$1,403.00				
Sonic Drilling - Stearns Drilling     Sonic Drilling	·			\$149,010.00	\$5,950.50				
MIP Drilling - Zebra Environmental     MIP Drilling				\$26,350.00	\$1,317.50				
8. IDW - EWMI IDW Disposal				\$3,100.00	\$0.00				
DLS Property Geoprobe - Geologic NY (WBE)     Geoprobe Drilling				\$19,200.00	\$960.00				
10. Survey - Om P Popli (MBE) Survey				\$3,688.00	\$184.00		ļ <u> </u>		
11 Larsen Engineers- Field Crew (MBE) Field Work Assistance				\$8,180.00	\$409.00				
TOTAL				\$247,078.00	\$12,199.00				

PROJECT MANAGER E	ENGINEER
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DATE		

NOTES: (1) Costs listed in Columns A, B, C & D do not include any management fee costs.

<sup>(2)</sup> Management fee is applicable to only properly procured, satisfactorily completed, unit price subcontracts over \$10,000.

<sup>(3) &#</sup>x27;TOTAL' line, Column I should equal Line 7 (subcontracts), Column C of Summary of Fiscal Information Cost Control Report.



# Table 2.11 (f-3)

# DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A Modock Road Springs

Data Validation - Data Validation Services (WBE)

Item	Unit Cost	No. of Items	Total Cost
Task 1			
Data Validation - Soil	\$20.00 /sample	60 samples	\$1,200.00
Data Validation - Groundwater	\$20.00 /sample	28 samples	\$560.00
Data Validation - Air	\$25.00 /sample	0 samples	\$0.00
Data Validation - Soil Vapor	\$30.00 /sample	0 samples	\$0.00
SUTOTAL - Task 1			\$1,760.00
MANAGEMENT FEE (TASK 1)			\$88.00
SUBTOTAL - Task 1 (INCLUDING MANAGEMENT FEE)			\$1,848.00
Task 2		:	
Data Validation - Soil	\$20.00 /sample	60 samples	\$1,200.00
Data Validation - Groundwater	\$20.00 /sample	63 samples	\$1,260.00
Data Validation - Air	\$25.00 /sample	45 samples	\$1,125.00
Data Validation - Soil Vapor	\$30.00 /sample	18 samples	\$540.00
SUTOTAL - Task 2			\$4,125.00
MANAGEMENT FEE (TASK 2)			\$206.00
SUBTOTAL - Task 2 (INCLUDING MANAGEMENT FEE)			\$4,331.00
TOTAL FOR ALL TASKS (INCL	UDING MANAGEMEN	IT FEE)	\$6,179.00

Note: These costs assume a standard turn around time.

same



# Table 2.11 (f-4)

# DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A Modock Road Springs

# Springs Geoprobe - Aztech Technologies (WBE)

Item	Unit Cost	No. of Items	Total Cost
Task 1			
Springs Geoprobe Day Rate	\$1,300.00 day	2 days	\$2,600.00
Overtime	\$195.00 hour	4.25 hours	\$829.00
Mobilization/Demobilization	\$1,360.00 LS	1	\$1,360.00
Per Diem	\$200.00 day	2 days	\$400.00
Direct Push Expendables	\$1.50 each	195	\$293.00
1" PVC Well Installation	\$5.75 foot	64 feet	\$368.00
6" Curb Box	\$89.00 each	4 boxes	\$356.00
SUTOTAL - Task 1			\$6,206.00
MANAGEMENT FEE (TASK 1)			\$310.00
SUBTOTAL - Task 1 (INCLUDING MANAGEMENT FEE)			\$6,516.00
TOTAL FOR ALL TASKS (INCL	UDING MANAGEMEN	Γ FEE)	\$6,516.00

same

# Table 2.11 (f-5)

# DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A Modock Road Springs

# Soil Gas Analysis - Beacon Environmental Services Inc.

Item	Unit Cost	No. of Items	Total Cost
Task 1			
8260B Analysis	\$169.00 sample	100 samples	\$16,900.00
SUTOTAL - Task 1			\$16,900.00
MANAGEMENT FEE (TASK 1)			\$845.00
SUBTOTAL - Task 1 (INCLUDING MANAGEMENT FEE)			\$17,745.00
Task 2		-	
8260B Analysis	\$169.00 sample	66 samples	\$11,154.00
SUTOTAL - Task 2			\$11,154.00
MANAGEMENT FEE (TASK 2)			\$558.00
SUBTOTAL - Task 2 (INCL)	\$11,712.00		
TOTAL FOR ALL TASKS (INCLUDING MANAGEMENT FEE)			\$29,457.00

same /

# Table 2.11 (f-6)

# DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A Modock Road Springs

# Sonic Drilling - Stearns Drilling

Item	Unit Cost	No. of Items	Total Cost
Task 1			
Mobilization/Demobilization	\$11,000.00 LS	· 1	\$11,000.00
Decon Pad	\$500.00 LS	1	\$500.00
Sonic Drilling	\$40.00 linear foot	720 feet	\$28,800.00
Monitoring Well Installation	\$23.00 linear foot	540 feet	\$12,420.00
Stick-up casing	\$235.00 each	6 wells	\$1,410.00
SUTOTAL - Task 1			\$54,130.00
MANAGEMENT FEE (TASK 1	)		\$2,706.50
SUBTOTAL - Task 1 (INCLUD)	ING MANAGEMENT FEE	()	\$56,836.50
Task 2			
Mobilization/Demobilization	\$11,000.00 LS	1	\$11,000.00
Decon Pad	\$500.00 LS	1	\$500.00
Sonic Drilling	\$40.00 linear foot	800 feet	\$32,000.00
Drums	\$55.00 drum	20 drums	\$1,100.00
Monitoring Well Installation	\$23.00 linear foot	800 feet	\$18,400.00
Stick-up casing	\$235.00 each	8 wells	\$1,880.00
SUTOTAL - Task 2			\$64,880.00
MANAGEMENT FEE (TASK 2)			\$3,244.00
SUBTOTAL - Task 2 (INCLUDI	NG MANAGEMENT FEE	)	\$68,124.00
TOTAL FOR ALL TASKS (INC	LUDING MANAGEMEN'	r fee)	\$124,960.50

same /

# Table 2.11 (f-7)

# DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A Modock Road Springs

# MIP Drilling - Zebra Environmental

Item	Unit Cost	No. of Items	Total Cost
Task 1			
Mobilization/Demobilization	\$1,450.00 LS	1	\$1,450.00
MIP Day Rate	\$3,900.00 day	6 days	\$23,400.00
Per Diem	\$250.00 day	6 days	\$1,500.00
SUTOTAL - Task 1			\$26,350.00
MANAGEMENT FEE (TASK 1)			\$1,317.50
SUBTOTAL - Task 1 (INCLUDING MANAGEMENT FEE)			\$27,667.50
TOTAL FOR ALL TASKS (INCLUDING MANAGEMENT FEE)			\$27,667.50

# Table 2.11 (f-8)

# DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A

Modock Road Springs

# IDW - EWMI

Item	Unit Cost	No. of Items	Total Cost
Task 1			
Disposal (soil)	\$0.00 /DRUM	15	\$0.00
Disposal (groundwater)	\$0.00 /DRUM	_ 5	\$0.00
Drum Transportation	\$0.00 /LS	1	\$0.00
SUBTOTAL - Task 1		· · · · · · · · · · · · · · · · · · ·	<b>\$0.00</b> ,
MANAGEMENT FEE (TAKS 1		\$0.00	
SUBTOTAL - Task 1 (INCLUD	\$0.00		
Task 2			
Disposal (soil)	\$95.00 /DRUM	15	\$1,425.00
Disposal (groundwater)	\$95.00 /DRUM	5	\$475.00
Drum Transportation	\$1,200.00 /L\$	1	\$1,200.00
SUTOTAL - Task 2			\$3,100.00
MANAGEMENT FEE (TAKS 2	)		\$0.00
SUBTOTAL - Task 2 (INCLUDING MANAGEMENT FEE)			\$3,100.00
TOTAL FOR ALL TASKS (INCLUDING MANAGEMENT FEE)			\$3,100.00

Same V

# Table 2.11 (f-9)

# DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A Modock Road Springs

# DLS Property Geoprobe - Geologic NY (WBE)

Item	Unit Cost	No. of Items	Total Cost
Task 1		·	
DLS Geoprobe Day Rate	\$1,800.00 day	.5 days	\$9,000.00
Per Diem	\$0.00 day	5 days	\$0.00
Mobilization/Demobilization	\$600.00 LS	1	\$600.00
SUTOTAL - Task 1			\$9,600.00
MANAGEMENT FEE (TASK 1)			\$480.00
SUBTOTAL - Task 1 (INCLUDI)	\$10,080.00		
Task 2	·		
DLS Geoprobe Day Rate	\$1,800.00 day	5 days	\$9,000.00
Per Diem	\$0.00 day	5 days	\$0.00
Mobilization/Demobilization	\$600.00 LS	1	\$600.00
SUTOTAL - Task 2			\$9,600.00
MANAGEMENT FEE (TASK 2)			\$480.00
SUBTOTAL - Task 2 (INCLUDING MANAGEMENT FEE)			\$10,080.00
TOTAL FOR ALL TASKS (INCI	LUDING MANAGEMEN	T FEE)	\$20,160.00

Same V

# Table 2.11 (f-10)

# DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439

Modock Road Springs

# Survey - Om P Popli (MBE)

Item	Unit Cost	No. of Items	Total Cost
Task 2			
Survey of 22 wells	\$3,688.00 Lump Sum	1 Lump Sum	\$3,688.00
SUTOTAL - Task 2			\$3,688.00
MANAGEMENT FEE (TAS	K 2)		\$184.00
SUBTOTAL - Task 2 (INCLUDING MANAGEMENT FEE)			\$3,872.00
TOTAL FOR ALL TASKS (INCLUDING MANAGEMENT FEE)			\$3,872.00

# Table 2.11 (f-11)

# DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439

Modock Road Springs

Larsen Engineers- Field Crew (MBE)

OK
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Item	Unit Cost	No. of Items	Total Cost
Task 2			
Field Assistance	\$485.33 day	15 days	\$7,280.00
Overtime	\$60.67 hour	0 hours	\$0.00
Hammer Drill	\$300.00 week	3 weeks	\$900.00
SUTOTAL - Task 2	\$8,180.00		
MANAGEMENT FEE (TAS	\$409.00		
SUBTOTAL - Task 2 (INCL	UDING MANAGEMENT FEI	E)	\$8,589.00
Task 3			
Field Assistance	\$827.50 day	0 days	\$0.00
SUTOTAL - Task 3			\$0.00
MANAGEMENT FEE (TAS	\$0.00		
SUBTOTAL - Task 3 (INCL	\$0.00		
TOTAL FOR ALL TASKS (	\$8,589.00		

ENGINEER: MALCOLM PIRNIE, INC

#### SCHEDULE 2.11(g)

DATE PREPARED:

11-Oct-07

NYSDEC CONTRACT/WA#:

D-004439-9A

Modock Road Springs

MONTHLY COST CONTROL REPORT SUMMARY OF FISCAL INFORMATION

BILLING PERIOD: 00/00/00 - 00/00/00 MPI STATEMENT #:

NYSDEC TASK #/NAME:

PROJECT NAME:

MPI PROJECT #:

0266361 SUMMARY

DEC VOUCHER #:

% of BUDGET COMPLETE: 0% В C D G. Α COSTS CLAIMED PAID TOTAL COSTS ESTIMATED COSTS **ESTIMATED TOTAL** APPROVED ESTIMATED EXPENDITURE THIS PERIOD TO DATE INCURRED TO DATE TO COMPLETION CONTRACT PRICE BUDGET UNDER/OVER CATEGORY (CAP #n-month) (thru CAP #n-month) (A + B)(F-C) (A+B+D) (Date) 1. DIRECT SALARY COST \$78,010 la. INDIRECT COST - 1.753 % \$136,752 2. SUBTOTAL: Billabe Labor Cost (1+1a) \$214,762 2a. OVER-TIME SALARY \$0 3. SUBTOTAL: Direct Salary, Indirect \$214,76

 ·				
		•	\$15,4	64
			\$9,5	95
			\$25,0	59
		-	]	
			\$499,0	198
			\$21,	176
	·			574
·				\$0
			\$520,	574
				\$259,2 \$12,1 \$499,0 \$21,4 \$520,5

•				
con myonings	· ·		DATE .	
PROJECT MANAGER ENGINEER		 	D	·

ENGINEER: MALCOLM PIRNIE, INC

#### SCHEDULE 2.11(g)

DATE PREPARED:

NYSDEC CONTRACT/WA #:

D-004439-9A

Modock Road Springs

MONTHLY COST CONTROL REPORT SUMMARY OF FISCAL INFORMATION

BILLING PERIOD: 00/00/00 - 00/00/00 MPI STATEMENT #:

NYSDEC TASK #/NAME: 1 - Work Plan Preparation

PROJECT NAME:

MPI PROJECT #:

0266361

DEC VOUCHER #:

% of BUDGET COMPLETE:	0%						
ÉXPENDITURE CATEGORY	A COSTS CLAIMED THIS PERIOD (CAP #n-month)	B PAID TO DATE (thru CAP #n-month)	C TOTAL COSTS INCURRED TO DATE (A + B)	D ESTIMATED COSTS TO COMPLETION (F-C)	E ESTIMATED TOTAL CONTRACT PRICE (A+B+D)	F APPROVED BUDGET (Date)	G ESTIMATED UNDER/OVER (F-E)
1. DIRECT SALARY COST						\$23,053	
1a. INDIRECT COST - 1.753 %	·					\$40,412	
2. SUBTOTAL: Billabe Labor Cost (1+1a)						\$63,465	·
2a. OVER-TIME SALARY						\$0	<u> </u>
3. SUBTOTAL: Direct Salary, Indirect  Cost and Over-time Cost (2+2a)						\$63,465	
4. TRAVEL & SUBSISTENCE						\$7,208	
5. OTHER NON-SALARY COST						\$2,837	
6. SUBTOTAL: Direct Non-Salary Cost (4+5)						\$10,044	
7. SUBCONTRACTORS  Management Fee included above						\$127,271 \$6,060	-
8. TOTAL CONTRACT COST (3+6+7)						\$200,780	
9. FIXED FEE - 10.0 %				-		\$6,347	
10. TOTAL CONTRACT PRICE (8+9)		<u> </u>		1		\$207,127	

		DATE	
PROJECT MANAGER ENGINEER	·	DATE	

PROJECT NAME:

MPI PROJECT #:

ENGINEER: MALCOLM PIRNIE, INC

#### SCHEDULE 2.11(g)

DATE PREPARED:

11-Oct-07

NYSDEC CONTRACT/WA #:

D-004439-9A

Modock Road Springs

MONTHLY COST CONTROL REPORT SUMMARY OF FISCAL INFORMATION

BILLING PERIOD: 00/00/00 - 00/00/00 MPI STATEMENT #:

0266361

NYSDEC TASK #/NAME:

2 - Site Investigation

DEC VOUCHER #:

% of BUDGET COMPLETE: 0%

# of BUDGET COMPLETE:  EXPENDITURE  CATEGORY	O%  A  COSTS CLAIMED  THIS PERIOD  (CAP #n-month)	B PAID TO DATE (thru CAP #n-month)	C TOTAL COSTS INCURRED TO DATE (A + B)	D ESTIMATED COSTS TO COMPLETION (F-C)	E ESTIMATED TOTAL CONTRACT PRICE (A+B+D)	F APPROVED BUDGET (Date)	G ESTIMATED UNDER/OVER (F-E)
1. DIRECT SALARY COST						\$41,263	
la. INDIRECT COST - 1.753 %						\$72,335	
2. SUBTOTAL: Billabe Labor Cost (1+1a)						\$113,598	
2a. OVER-TIME SALARY						\$0	
3. SUBTOTAL: Direct Salary, Indirect						\$113,598	
Cost and Over-time Cost (2+2a)							•
4. TRAVEL & SUBSISTENCE						\$7,208	
5. OTHER NON-SALARY COST						\$6,659	
6. SUBTOTAL: Direct Non-Salary Cost (4+5)						\$13,866	
7. SUBCONTRACTORS						\$132,006	
Management Fee included above						\$6,139	
8. TOTAL CONTRACT COST (3+6+7)						\$259,470	
9. FIXED FEE - 10.0 %						\$11,360	
10. TOTAL CONTRACT PRICE (8+9)			<del></del>			\$270,830	

PROJECT MANAGER ENGINEER	DATE
THOUSET WHITE SITE STORY	

ENGINEER: MALCOLM PIRNIE, INC

SCHEDULE 2.11 (g) - Supplemental

DATE PREPARED:

11-Oct-07

NYSDEC CONTRACT #:

D-004439

SUBCONTRACTOR COST CONTROL REPORT

BILLING PERIOD: mm/dd/yy - mm/dd/yy

NYSDEC WA #: MPI PROJECT #: WA-9A 0266361

SUMMARY OF FISCAL INFORMATION

**MPI STATEMENT #:** 

PROJECT NAME:

Modock Road Springs

**CPFF and Unit Price Subcontractors** 

DEC VOUCHER #:

	A	В	С	D	E	F	G	Н	I
	SUBC	ONTRACTOR	COSTS		MAN	AGEMENT	FEE		
SUBCONTRACT NAME	CURRENT COSTS, INCLUDES RESUBMITTALS	PAID TO	TOTAL COSTS TO DATE	APPROVED	MNGT. FEE BUDGET	FEE THIS	PENDING	FEE PAID	TOTAL COSTS TO DATE
	RESUBMITTALS	DATE	(A + B)	BUDGET		PERIOD	FEES	TO DATE	(C + F + H)
lost-Plus-Fixed-Fee: Subcontactors 1. 0 0				\$0.00	\$0.00				
Subtotal - CPFF Subs:				\$0.00	\$0.00				<del></del>
nit Price Subcontactors						7			·
Laboratory - Chemtech (MBE)     Air Analytical		·		\$12,530.00	\$627.00	<b>1</b>			
Laboratory - STL     Soil and GW Analytical				\$14,875.00	\$744.00				
Data Validation - Data Validation Services (WBE)     Data Validation				\$5,885.00	\$294.00				
Springs Geoprobe - Aztech Technologies (WBE)     Geoprobe Drilling				\$6,206.00	\$310.00				
Soil Gas Analysis - Beacon Environmental Services Inc.     Soil Gas Analysis				\$28,054.00	\$1,403.00	\			
6. Sonic Drilling - Steams Drilling Sonic Drilling				\$119,010.00	\$5,950.50				
7. MIP Drilling - Zebra Environmental MIP Drilling				\$26,350.00	. \$1,317.50				
8. IDW - EWMI IDW Disposal				\$3,100.00	\$0.00				
9. DLS Property Geoprobe - Geologic NY (WBE) Geoprobe Drilling				\$19,200.00	\$960.00				
10. Survey - Om P Popli (MBE) Survey				\$3,688.00	\$184.00		ł		
11 Larsen Engineers- Field Crew (MBE) Field Work Assistance				\$8,180.00	\$409.00				
Subtotal - Unit Price Subs:				\$247,078.00	\$12,199.00		7		
TOTAL				\$247,078.00	\$12,199.00			·	

	•	
PROJECT MANAGER ENGINEER		DATE _

<sup>(1)</sup> Costs listed in Columns A, B, C & D do not include any management fee costs.

<sup>(2)</sup> TOTAL' line, Column I should equal Line 7 (subcontracts), Column C of Summary of Fiscal Information Cost Control Report.

# SCHEDULE 2.11 (h) Modock Road Springs (#D-004439-9A) MONTHLY COST CONTROL REPORT - SUMMARY OF LABOR HOURS

Expended to Date/Estimated to Completion

[WORKSHEET - To be submitted, but separately]

Page 1 of 1

Billing Period:

Total Ho	ours Est	15	191	245	2	8	8	850	724	42	500	2,585
Total He	ours Exp	0	0	0	0	0	0	0	0	0	0	0
	Subtotal Exp hour	S 0	0			. 0	0	U	U	. 0	U	U
		<del></del>	0	0	0	0	0	0	0	0	0	730
			65	89	0	4	8	295	178	20	70	1,855 730
	Subtotal 2007 hour		126	156	2	4	. 8	555	546	22	430	
	200		0	0	0	0	.0	0	0	0	0	0
	E		0	0	0	0	0	0	0	0	0	0
Task 4	Unassigned E <sub>3</sub>		<del> </del>	0	0	0	0.	0	0	0	0	0
T1- 4			0		-							
	200		49	65	0	0	0	145	58	20	0	345
	E		49	65	0	0	0	145	58	20	0	345
ask 3		PI	<u> </u>									
Task 3	T		0	0	0	0	0	0	0	0	0	0
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	E		91	114	0	8	0	465	391	20	370	1,461
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	200		51	66	2	0	8	240	275	2	130	779
	E		51	66	2	0	8	240	275	2	130	779
Task I	Work Plan Preparation Ex	p 0	0	0	0	0	0	0	0	. 0	0	0
Task#	Labor Classification Task Name	9 Exp/Est	Exp/Est	7 Exp/Est	6 Exp/Est	5 Exp/Est	4 Exp/Est	3 Exp/Est	2 Exp/Est	l Exp/Est	Tech Exp/Est	Direct Labor Hours Exp/Est
	NSPE			_		_			_			Total No.

# CONFLICT OF INTEREST CERTIFICATION MODOCK ROAD SPRINGS VICTOR, NEW YORK PAGE 1 of 1

To the best of the Department of Environmental Conservation's knowledge, the potential responsible parties listed below are the known potential responsible parties as of May 2007.

- D.L.S Sand & Gravel, Inc.
- Syracusa Sand & Gravel

The undersigned authorized representative, for the subcontractor indicated below, hereby certifies for the Modock Road Springs project that to the best of his/her knowledge the subcontractor has no organizational or personal conflict of interest with the potential responsible parties listed above.

Certified By:

I acknowledge that the subcontractor has no conflict of interest.

For CHMICCH Consulting Coroll Inc.
(Corporation Name)
In Sew York
(State of Incorporation)
By THAM
(Signature of Authorized Representative)
Business Address: 284 Steffeld St.
Mountainside N.1. 07092
Phone No.: 908-789-8900 FAX No. 908-789-8922
e Mail address F +1 (a) Nom +0 PR 10+

# New York State Department of Environmental Conservation Division of Environmental Remediation

#### **Subcontract Certification**

On behalf of the Contractor named below, I hereby certify that the subcontract named below was procured in accordance with the terms of the prime contract and all applicable requirements of the State of New York. I also hereby certify that the executed subcontract includes all appropriate language and all required documents were completed appropriately and were acceptable. Specifically, I hereby certify the following:

- 1. The Contractor has determined that the subcontractor is qualified. A statement of qualifications for the subcontractor is maintained. It does include a statement of compliance with all licenses, certifications and permits, if applicable. (Note: This can be determined at: http://www.wadsworth.org/labservices.htm).
- 2. The Contractor has determined the costs are reasonableness. A procurement record supporting the determination is maintained.
- The Contractor performed a Conflict of Interest (COI) check, if applicable, and documented it in writing. (Refer to Appendix B, clause III (e) for applicability. (Note that for standby subcontractors, the COI certification must be submitted to the project manager upon activation.)
- 4. For subcontracts in excess (or anticipated to be) of \$10,000 the subcontractor submitted an acceptable New York State Uniform Contracting Questionnaire. For subconsultants in excess (or anticipated to be) of \$10,000 the subconsultant submitted an acceptable New York State Vendor Responsibility Questionnaire. (Information related to vendor responsibility can be found at <a href="http://www.osc.state.ny.us/agencies/gbull/g221.htm">http://www.osc.state.ny.us/agencies/gbull/g221.htm</a>.)
- 5. The subcontract includes pass down requirements from Appendix B of the prime contract related to Minority and Women Business Enterprises/WBE and Conflict of Interest (COI).
- 6. The Subcontract includes the termination clause required in the prime contract.
- 7. The subcontract does not include "pay when paid" type clauses which are unenforceable in New York State.
- 8. Insurance carriers associated with the subcontract are licensed to do business in New York State. The State of New York and the Department of Environmental Conservation are named as additional insurers on the policies. Insurance limits meet prime contract requirements. (Note that licensed insurance can be determined at: <a href="http://www.ins.state.ny.us">http://www.ins.state.ny.us</a> and Best's Rating can be determined at <a href="http://www.ambest.com">http://www.ambest.com</a>). Pollution liability insurance (for example, drilling subcontractors) and professional liability insurance (for example, subcontracts for professional services and laboratories) is included as appropriate.)

9. Documentation supporting this certification is maintained any request/	and will be provided within 10 o	lays of
Temps Jouventer	10/11/07	
Signature of Contractor's Authorized Representative Malcolm Pimie, Inc.	<b>Date</b> D004439-9	
Contractor Name Chemtech	Contract No. WA No.	
Subcontractor Name		2/7/0

# CONFLICT OF INTEREST CERTIFICATION MODOCK ROAD SPRINGS VICTOR, NEW YORK PAGE 1 of 1

To the best of the Department of Environmental Conservation's knowledge, the potential responsible parties listed below are the known potential responsible parties as of May 2007.

- D.L.S Sand & Gravel, Inc.
- Syracusa Sand & Gravel

The undersigned authorized representative, for the subcontractor indicated below, hereby certifies for the Modock Road Springs project that to the best of his/her knowledge the subcontractor has no organizational or personal conflict of interest with the potential responsible parties listed above.

Certified By:

I acknowledge that the subcontractor has no conflict of interest.

For LARSEN P.E. L. S. P.C (La LARSEN ENGINEERS)
(Corporation Name)
In NEW YORK
(State of Incorporation)
By OR SL DO S.R. SHRIVASTAVA PRESIDENT, CEO
(Signature of Authorized Representative)
Business Address: 700 W. METROPARK
ROCHESTER, N.Y. 14623
Phone No.: 585 - 272 - 7310 FAX No. 585 - 272 - 0159
e-Mail address.: vama Carsen - engineers. Com



# **Interoffice Correspondence**

Date:

October 11, 2007

To:

Modock Road Springs 0266361 (FILE)

From:

Bruce Nelson, ALB

Re:

Larsen Engineers, Inc. - Field Assistance - Soil vapor sampling

Work Assignment No.: D004439-9

Malcolm Pirnie has reviewed the cost for field assistance for soil vapor sampling at the above-referenced site provided by Larsen Engineers, Inc. and we believe that it is reasonable based on cost proposals we have received for similar services during the last 6 months.

brn

# New York State Department of Environmental Conservation Division of Environmental Remediation

#### **Subcontract Certification**

On behalf of the Contractor named below, I hereby certify that the subcontract named below was procured in accordance with the terms of the prime contract and all applicable requirements of the State of New York. I also hereby certify that the executed subcontract includes all appropriate language and all required documents were completed appropriately and were acceptable. Specifically, I hereby certify the following:

- 1. The Contractor has determined that the subcontractor is qualified. A statement of qualifications for the subcontractor is maintained. It does include a statement of compliance with all licenses, certifications and permits, if applicable. (Note: This can be determined at: <a href="http://www.wadsworth.org/labservices.htm">http://www.wadsworth.org/labservices.htm</a>).
- The Contractor has determined the costs are reasonableness. A procurement record supporting the determination is maintained.
- 3. The Contractor performed a Conflict of Interest (COI) check, if applicable, and documented it in writing. (Refer to Appendix B, clause III (e) for applicability. (Note that for standby subcontractors, the COI certification must be submitted to the project manager upon activation.)
- 4. For subcontracts in excess (or anticipated to be) of \$10,000 the subcontractor submitted an acceptable New York State Uniform Contracting Questionnaire. For subconsultants in excess (or anticipated to be) of \$10,000 the subconsultant submitted an acceptable New York State Vendor Responsibility Questionnaire. (Information related to vendor responsibility can be found at <a href="http://www.osc.state.ny.us/agencies/gbull/g221.htm">http://www.osc.state.ny.us/agencies/gbull/g221.htm</a>.)
- 5. The subcontract includes pass down requirements from Appendix B of the prime contract related to Minority and Women Business Enterprises/WBE and Conflict of Interest (COI).
- 6. The Subcontract includes the termination clause required in the prime contract.
- The subcontract does not include "pay when paid" type clauses which are unenforceable in New York State.
- 8. Insurance carriers associated with the subcontract are licensed to do business in New York State. The State of New York and the Department of Environmental Conservation are named as additional insurers on the policies. Insurance limits meet prime contract requirements. (Note that licensed insurance can be determined at: <a href="http://www.ins.state.ny.us">http://www.ins.state.ny.us</a> and Best's Rating can be determined at <a href="http://www.ambest.com">http://www.ambest.com</a>). Pollution liability insurance (for example, drilling subcontractors) and professional liability insurance (for example, subcontracts for professional services and laboratories) is included as appropriate.)

9. Documentation supporting this certification is maintained a any request	10/11/07	
Signature of Contractor's Authorized Representative Malcolm Pirnie, Inc.	Date D004439-9	
Contractor Name Larsen Engineers, Inc.	Contract No. WA No.	
Subcontractor Name		2

From:

"Nelson, Bruce R." <BNelson@PIRNIE.com>

To:

"Ralph Burger" <reburger@gw.dec.state.ny.us>

Date:

8/8/2007 4:31:42 PM

Subject:

Modock Road Springs RI/FS Revised PMWP Submission

Ralph:

Attached is the revised Modock Road Springs RI/FS PMWP, including 2.11s and supporting documentation as well as a copy of the cover letter that transmits the hard copies that are being sent to you as well. As indicated in the cover letter, the RI/FS work plan has been revised to incorporate the technical comments provided by the PM. We will send the RI/FS work plan to the PM as an attachment to a following e-mail due to the size of this attachment.

Thank you for your assistance. Please let me know if you have any questions.

--Bruce

Bruce R. Nelson, C.P.G.

Senior Associate

Malcolm Pirnie, Inc.

43 British American Blvd.

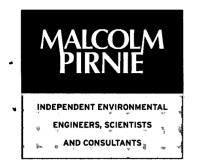
Latham, NY 12110

(518) 782-2115 (direct)

(518) 782-0500 (fax)

bnelson@pirnie.com

**CC:** "Jason Pelton" <jmpelton@gw.dec.state.ny.us>, "Joseph White" <ajwhite@gw.dec.state.ny.us>



Malcolm Pirnie, Inc.

43 British American Boulevard Latham, NY 12110-1402 T: 518-782-2100 F: 518-782-0500 www.pirnie.com

August 8, 2007

Ralph Burger New York State Department of Environmental Conservation 625 Broadway Albany New York 12233

Re: Revised Modock Road Springs PMWP and RIFS Work Plan (WA# D-004439-9)

Dear Mr. Burger:

Enclosed for your review are the revised Modock Road Springs (WA# D-004439-9) Project Management Work Plan (PMWP) and Remedial Investigation (RIFS) Work Plan. The work plans were revised per NYSDEC comments and subsequent telephone conversations with NYSDEC.

In response to your inquiry as to why multiple drillers are proposed, each drilling task requires separate specialty equipment/techniques. Unfortunately, no one drilling company provides all such services.

If you have any questions, please call me at (518) 782-2115.

Very truly yours,

MALCOLM PIRNIE, INC.

Bruce R. Nelson, P.G.

Senior Associate

MAF

F:\PROJECT\0266361\FILE\RIFS WP\RIFS WP Revised\Burger Ltr.doc

c: Jason Pelton, NYSDEC Joe White, NYSDEC From:

Ralph Burger

To:

Pelton, Jason

Date:

8/1/2007 2:00:37 PM

Subject:

Modock Road MPI WA 4439-9

1) Please have the detailed description of the scope of work contained in the work assignment issuance letter added to the PMWP. The outline summary on page 2-1 and 2-2 is not sufficient.

2) Specifically, why was geoprobe drilling (2 different drillers), sonic drilling, and MIP drilling used on this site? Why couldn't one driller used for all sampling?

# **New York State Department of Environmental Conservation**

Division of Environmental Remediation, 12th Floor

625 Broadway, Albany, New York 12233-7011 **Phone:** (518) 402-9706 • **FAX:** (518) 402-9020

Website: www.dec.state.ny.us



NOV - 1 2007

Mr. Bruce Nelson Malcolm Pirnie, Inc. 43 British-American Boulevard Latham, NY 12110

RE: Work Plan Approval/Notice-to-Proceed

Work Assignment #D004439-9

Modock Road Springs/DLS Sand & Gravel, Inc.

Site #835013

Dear Mr. Nelson:

The New York State Department of Environmental Conservation's Division of Environmental Remediation (DER) approves Malcolm Pirnie's work plan dated August 2007 for the above-referenced project. The work plan is for a total work assignment budget of \$520,574 for the development and implementation of a Remedial Investigation/Feasibility Study. The RI will expand on earlier site investigations and the IIWA; provide a thorough characterization of the nature and extent of contamination; and provide the necessary data to evaluate interim remedial measures (if necessary) and conduct a feasibility study. The FS will identify and evaluate possible alternatives available to remediate the site and will be used as the basis for selecting a preferred remedial alternative.

DER authorizes your firm to proceed with the scope of work in this work plan. All work should be completed in accordance with the schedule in the work plan.

If you have any questions regarding this work plan, please contact the Project Manager, Mr. Jason Pelton, at (518) 402-9812.

Sincera

Dale A. Desnovers

Director

Division of Environmental Remediation

# ec: <u>bnelson@pirnie.com</u>

- J. Pelton, PM
- L. Lewis, CM
- B. Putzig, Region 8
- D. Desnoyers
- D. Weigel
- M. Cruden
- W. Daigle
- J. White
- S. Gupta
- V. Alfonso, M/WBE
- T. Christian, M/WBE
- T. Wolosen



# New York State Department of Environmental Conservation

625 Broadway • Albany, New York 12233-7011

Modock Road Springs/DLS Sand and Gravel, Inc. Site (HW 8-35-013) Victor, New York

Work Assignment # D-004439-9

# Project Management Work Plan

August 2007



Work Plan Prepared By:

Malcolm Pirnie, Inc.

43 British American Blvd. Latham, New York 12110 518-782-2100



0266361

WIPPROVED

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Figure 2: Proposed Project Team

# **Appendices**

- A. 2.11 Schedules
- B. Subcontractor Bids
- C. Subcontractor Cost Backup Memos
- D. Subcontractor Conflict of Interest Forms
- E. Subcontractor Certifications
- F. Consultant Checklist

# 1. Introduction

The New York State Department of Environmental Conservation (NYSDEC) tasked Malcolm Pirnie, Inc. (Malcolm Pirnie) to perform an Remedial Investigation/Feasibility Study (RI/FS) at the Modock Road Springs/DLS Sand and Gravel, Inc. Site (HW 8-35-013), in the Town of Victor, New York (Figure 1).

The RI/FS will be conducted under the NYSDEC State Superfund Standby Contract No. D004439-9. This RI/FS consists of the following three tasks:

- Task 1 Background Review and Preparation of Work Plans
- ™ Task 3 Preparation of Feasibility Study

A brief summary of these tasks is included in Section 2.

# 1.1. Work Plan Development

Malcolm Pirnie has prepared this Work Plan following acceptance of the Work Assignment issued by the NYSDEC. The scope of the work generally includes Work Plan development, a site investigation, and a feasibility study. This Work Plan provides information on the following:

- Major tasks and subtasks,
- Staffing plan,
- Subcontracting,
- Cost assumptions and budget,
- Proposed schedule, and
- MBE/WBE utilization plan.

The 2.11 series of schedules, which provide a summary of the project budget, are included in Appendix A.



# 1.2. Site Information

The Modock Road Springs site is located in a rural/suburban area in the Town of Victor, Ontario County, New York. In advance of a Remedial Investigation/Feasibility Study (RI/FS) at the Modock Road Springs site, an indoor air monitoring program was completed as part of the immediate investigation work assignment (IIWA) during the 2006/2007 heating season. Data collected during previous investigations have documented the presence of trichloroethene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), and cis-1,2-dichloroethene (cis-DCE) in groundwater beneath a rural and suburban residential area of the Town of Victor. The groundwater plume appears to originate near or on the DLS Sand & Gravel, Inc. property and extends approximately one mile to the north where it discharges to surface water via a series of springs (Figure 1). The springs were used as a drinking water source for the Town of Victor until 1990 when TCE and 1,1,1-TCA were detected in the spring water. Over the length of the groundwater plume, total chlorinated volatile organic compound (CVOC) concentrations have ranged from approximately 16 parts per million (ppm) near the southern portion of the plume to approximately 250 parts per billion (ppb) at the springs.



The scope of work for this Work Assignment includes the development and implementation of an RI/FS. The RI will expand on earlier site investigations and the IIWA, and will provide a thorough characterization of the nature and extent of contamination, and will provide the necessary data to evaluate interim remedial measures (IRMs), if necessary, and conduct an FS. The FS will identify and evaluate possible alternatives available to remediate the site and will be used as the basis for selecting a preferred remedial alternative. A list of the RI/FS tasks and subtasks is provided below. A summary of these tasks is provided in the RI/FS Work Plan.

# Task 1 - Background Review and Preparation of Work Plans

Subtask 1.1 Project Management Work Plan (PMWP)

#### 1.1.1 Historical Records and Title Search

Available historic and/or background information (documents, maps, etc.) and existing site investigation records will be reviewed. Potential sources and areas of contamination will be identified through examination of historic records, aerial photographs, and other site background information.

Tax maps and records will be reviewed to determine land ownership of the site and adjacent properties to the extent not previously accomplished. To further assess previous site activities, available aerial photographs will be examined.

#### 1.1.2 Site Visit

A site visit will be conducted with the NYSDEC prior to the scoping session. Arrangements with the site owner will be made by the NYSDEC.

#### 1.1.3 Scoping Session

A scoping session will be held at the NYSDEC Albany office following the site visit and record review. At a minimum, the details of the following items will be discussed and agreed upon:

- The tentative scope of the field investigation;
- The total number of samples and analyses for each media;



- The expectations for the RI Report;
- E The approach to the FS; and
- The project schedule.

# 1.1.4 Project Management Work Plan

This PMWP provides information outlined in Section 1.1.

Subtask 1.2 Preparation of the RI/FS Work Plan

Malcolm Pirnie will submit a RI/FS Work Plan which will contain the following:

- Final FAP including all procedures for completing the field investigation.
- Site Specific Health and Safety Plan (HASP) and Community HASP/Air Monitoring Plan.
- NYSDEC Standby Contract Generic Specific Quality Assurance Project Plan (QAPP).

#### Subtask 1.3 Completion of Passive Soil Gas Investigation

In advance of the drilling programs outlined in Subtasks 1.4 and 1.5, a passive soil gas investigation, using Be Sure<sup>®</sup> samplers, or comparable, will be completed during implementation of Task 1 of this work assignment. The passive soil gas investigation will be completed to primarily identify potential source areas, to characterize the lateral extent of shallow soil contamination, and to possibly remove certain areas from consideration as suspect disposal areas.

The soil gas monitoring will be performed according to a pre-defined, evenly-spaced sampling grid. This includes the northern portion of the DLS Sand and Gravel property and the area near monitoring well MW-14. In total, it is expected that approximately 100 passive soil gas samplers will be deployed as part of the passive soil gas investigation included in Subtask 1.3.

The vadose zone monitoring will be used to optimize subsequent site characterization activities during implementation of the direct push program and subsurface drilling programs included in Subtasks 1.4, 1.5, 2.2, and 2.3. The vadose zone monitoring will be completed using an acceptable passive soil gas methodology and will include the collection of Quality Assurance and Quality Control samples.

Immediately upon deploying the passive soil gas samplers, each sample location will bed marked with a survey flag. Each survey flag will include sample identification information that can be used by Department staff during a subsequent high precision



global positioning system (GPS) survey. At each sampling location, a part per billion sensitive photoionization detector will be used to screen shallow soil gas for volatile organic compounds (VOCs) at the respective passive soil gas sampling point.

# Subtask 1.4 Direct Push/Geoprobe Drilling

A direct push drilling program will be implemented as part of this RI/FS to evaluate the overburden unit in specific areas identified following completion of Subtask 1.3 (Soil Gas Investigation). The direct push drilling program will additionally expand on work completed as part of the earlier investigation activities. Similar to the soil gas investigation, it is expected that the majority of the direct push soil borings will be advanced in the northern portion of the DLS Sand and Gravel property. However, some borings will be advanced near the Modock Road Springs as described below.

# (1) Shallow Direct Push Soil Borings on the DLS Sand and Gravel property

Up to 20 shallow soil borings will be drilled on the DLS Sand and Gravel property. Soil borings will be advanced to a depth of approximately 10 to 20 feet below ground surface to evaluate shallow soil quality and possible disposal areas identified during the soil gas investigation.

Subsurface soil samples will be collected continuously from each of the soil borings until the target depth is encountered. Each soil sample will be described and logged relative to its geologic character, features, and properties. The soil will be screened visually for evidence of contamination and will be collected for field analysis using a photoionization detector (PID). The field screening along with field observations will be used to select soil samples for subsequent laboratory analysis. If no contamination is detected, the subsurface soil samples for laboratory analysis will either be collected from a low permeability interface or from an area with increased soil moisture.

Overall, and based on the field screening, up to 40 soil samples will be collected during and submitted to the laboratory for VOC analysis using EPA method 8260B. All soil samples will be sent to an approved laboratory for analysis and in accordance with the Department Analytical Services Protocol. The selection of subsurface soil materials for laboratory analysis will be made in consultation with the NYSDEC field representative.

Following the completion of each direct push soil boring, the consultant will mark the sample location with a survey stake. Each survey stake will include boring identification information that can be used by NYSDEC during a subsequent high precision GPS survey.



# (2) Shallow Soil Borings and Groundwater Sampling Near Springs

Up to 8 shallow soil borings near the Modock Road Springs will be drilled to define subsurface stratigraphy and to evaluate shallow groundwater quality. It is expected that the shallow soil borings will be advanced to a depth of approximately 20 feet below ground surface. Temporary monitoring wells will be installed in up to 4 of these borings. A Geoprobe Systems stainless steel screenpoint or temporary well point will be used to collect groundwater samples from each of the shallow borings.

# (3) Deep Soil Borings with use of Membrane Interface Probe (MIP)

The direct push drilling program will include a series of deep borings and the use of the Geoprobe Systems Membrane Interface Probe (MIP) to assess VOCs in both the saturated and unsaturated zones. It is expected that up to 15 deep borings using the MIP will be advanced at locations identified based on evaluation of the passive soil gas investigation and shallow soil sampling completed as part of component one of this Subtask. Soil samples will not be collected during Membrane Interface Probe drilling.

# Subtask 1.5 Subsurface Drilling Program and Monitoring Well Installation

A drilling program with monitoring well installations will be implemented as part Task 1 of this RI/FS to evaluate the overburden stratigraphy; groundwater quality; and groundwater flow patterns. Existing groundwater data along with the results of the previously discussed soil gas investigation (Subtask 1.3) and direct push drilling program (Subtask 1.4) will be used to identify drilling locations and monitoring well installations as part of the subsurface drilling program (Subtask 1.5). It is expected that a total of 6 soil borings will be drilled and subsequently completed as groundwater monitoring wells at the Modock Road Springs site.

During the drilling program, subsurface soil samples will be collected continuously from each of the soil borings until the target depth is encountered. Special attention will be given to examining the interfaces/low permeability zones for the presence of dense non-aqueous phase liquids (DNAPL).

Subsurface soil samples will be collected to obtain information on the characteristics of the overburden material and for submittal to a laboratory for further analysis. The soil samples will be described and logged with respect to their geologic character, features, and properties. The soil will be screened visually for evidence of contamination. All or some part of any subsurface soil interval extracted from a specific soil boring may be collected as a soil sample for laboratory analysis at the discretion of the Department representative. It is expected that up to 12 additional subsurface soil samples may be



collected for laboratory analysis during this drilling program. The soil samples will be sent to an approved laboratory for VOC analysis and in accordance with the NYSDEC Analytical Services Protocol. The selection of subsurface soil materials for laboratory analysis will be made in consultation with the NYSDEC and will be based on:

- Subsurface soil materials that show visual signs of contamination; or
- Subsurface soil materials that cause a sustained response above the measured background response on a calibrated flame or photo ionization screening instrument; or
- A combination of these situations.

# 1.5.1 Six soil borings completed as groundwater monitoring wells

The exact placement of the monitoring wells will be based upon the information collected during the soil gas investigation, direct push drilling program, and knowledge of the existing distribution of contaminants based on earlier investigation results. It is expected that the shallow monitoring wells will be constructed similar to the construction of the existing monitoring well network. The existing wells are constructed with a 10 to 15 foot screened interval that is entirely within the shallow overburden system. Well depth varies based on location and distance from the Modock Road Springs. Existing well MW-5, located near the Modock Road Springs was installed to a depth of 22.5 feet below ground surface. Existing well MW-10, located approximately 3,000 feet upgradient of the Modock Road Springs was installed to a depth of 90 feet below ground surface. It is expected that the deep wells will be sampled as part of Subtask 2.3). Malcolm Pirnie will oversee the drilling and installation of monitoring wells according to the procedures described below.

### 1.5.2 Monitoring Well Installation Method

The drilling program will include the installation of both shallow and deep groundwater monitoring wells. The shallow wells will be approximately 30 to 90 feet deep and screened entirely within the shallow bedrock system. During installation, the overburden will be drilled using 6-1/4 inch inside diameter (I.D.) hollow-stem augers, with continuous split spoon sampling to the top of the underlying confining unit. Alternatively, sonic drilling methodologies may be used for completion of the drilling program. Although the work assignment scope of work outlines that hollow stem auger drilling methods will be used during RI implementation, the actual drilling technique will be selected based on discussions with Malcolm Pirnie during the scoping session.



Each monitoring well will be constructed with a ten-foot length of two-inch I.D. threaded schedule 40 PVC flush-joint casing with a ten-foot machine slotted 0.010-inch well screen. The annulus around the well screen will be backfilled with No. 1 Morie sand. The sand pack will extend one to two feet above the well screen. A bentonite seal will be placed above the sand pack to form a minimum two foot seal. Cement/bentonite grout will be placed to within three feet of the ground surface. Each well will have a vented cap and there will be a locking cover. A cement pad will be installed to channel surface water away from the well. A weep hole will be drilled in the protective casing to allow any water between the inner and outer casing to drain. The monitoring well identifications will start with MW-15. Deep monitoring wells will be identified with a "D" that is immediately preceded by the well number (i.e. MW-15D).

#### 1.5.3 Well Development

The monitoring wells will be developed no sooner than 24 hours following installation by surging and pumping techniques. Well development will be considered complete when temperature, conductivity, and pH have stabilized and a turbidity of less than 50 NTUs has been achieved.

#### Subtask 1.6 Storage and Disposal of Waste

Malcolm Pirnie will be responsible for the proper storage, handling, and disposal of investigative derived waste (IDW) including personal protective equipment, and solids and liquids generated during the well drilling, well development, and well sampling activities. Liquids generated during well drilling, well development, and well sampling will be placed in drums and properly disposed unless there is no visual or olfactory evidence of contamination and it is known that high concentrations of contaminants do not exist. Excess drill cuttings generated from the installation of monitoring wells will also be drummed and Malcolm Pirnie will arrange for proper disposal. All drummed materials will be clearly labeled as to their contents and origin. All IDW will be managed in accordance with DEC-DER TAGM 4032.

#### Subtask 1.7 Interim Remedial Measure Evaluation

Subtask 1.7 of the Modock Road Springs RI/FS will include a detailed alternatives analysis for the use of a permeable reactive wall as a mechanism to address off-site groundwater contamination as part of an interim remedial measure. The alternatives analysis will conclude with the preparation of a letter report detailing the analysis. The report will include tables to summarize IRM options and associated costs



#### Task 2 - Site Investigation

The primary focus of this WA is to evaluate existing on-site and off-site conditions, evaluate groundwater flow direction, evaluate the nature and extent of the contamination, evaluate possible human exposure to the contaminants, and develop a remedial approach to address on-site and off-site contamination. The overall WA project will begin with follow-up soil gas investigation and direct push drilling activities to better understand the possible source area/areas on the DLS Sand & Gravel, Inc. property. These Task 2 activities will be based on the results obtained during the completion of Subtasks 1.3, 1.4, and 1.5 above. It is expected that the majority of the direct push soil borings will be installed along the north-side of the DLS Sand & Gravel, Inc. property. Following the direct push drilling program, a series of both on-site and off-site overburden wells will be installed and subsequently sampled. If necessary, an indoor air sampling program will be completed as a follow-up to the indoor air sampling activities completed as part of the IIWA. The following Work Assignment sections provide more detail on the overall scope of the RI/FS.

#### Subtask 2.1 Soil Gas Investigation

If necessary based on the results of the soil gas investigation activities completed as part of Subtask 1.3, a follow-up passive soil gas investigation, using Be Sure<sup>®</sup> samplers, or comparable, will be completed. The passive soil gas investigation will be completed to primarily identify potential source areas and to characterize the lateral extent of shallow soil contamination.

The soil gas monitoring will be performed according to a pre-defined, evenly-spaced sampling grid along the northern portion of the DLS Sand and Gravel property and the area near monitoring well MW-14. In total, it is expected that approximately 50 passive soil gas samplers will be deployed as part of the Subtask 2.1 passive soil gas investigation.

The vadose zone monitoring will be used to optimize subsequent site characterization activities during implementation of the direct push program and subsurface drilling programs included in Subtasks 2.2 and 2.3. The vadose zone monitoring will be completed using an acceptable passive soil gas methodology and will include the collection of Quality Assurance and Quality Control samples.

Immediately upon deploying the passive soil gas samplers, the consultant will mark the sample location with a survey flag. Each survey flag will include sample identification information that can be used by Department staff during a subsequent high precision global positioning system (GPS) survey.



#### Subtask 2.2 Direct Push/Geoprobe Drilling - 20 shallow soil borings

To expand on site characterization activities completed during Subtask 1.3, 1.4, and 1.5 above, a direct push drilling program will be implemented as part of this RI/FS to evaluate the shallow overburden unit. Similar to the soil gas investigation, it is expected that the majority of the direct push soil borings will be installed in the northern portion of the DLS Sand and Gravel property. It is estimated that a total of approximately 20 follow-up shallow soil borings will be advanced on the DLS Sand and Gravel property as part of Subtask 2.2. It is expected that the shallow soil borings will be advanced to a depth of approximately 10 to 20 feet below ground surface to evaluate shallow soil quality and possible disposal areas.

During the direct push drilling program, subsurface soil samples will be collected continuously from each of the soil borings until the target depth is encountered. Each soil sample will be described and logged relative to its geologic character, features, and properties. The soil will be screened visually for evidence of contamination and will be collected for field analysis using a photoionization detector (PID). The field screening along with field observations will be used to select soil samples for subsequent laboratory analysis. If no contamination is detected, the subsurface soil samples for laboratory analysis will either be collected from a low permeability interface or from an area with increased soil moisture.

Based on the field screening, up to 20 soil samples will be collected during the direct push drilling program and submitted to the laboratory for VOC analysis using EPA method 8260B. All soil samples will be sent to an approved laboratory for analysis and in accordance with the Department Analytical Services Protocol. The selection of subsurface soil materials for laboratory analysis will be made in consultation with the NYSDEC.

Following the completion of each direct push soil boring, the sample locations will be marked with a survey stake. Each survey stake will include boring identification information that can be used by Department staff during a subsequent high precision GPS survey.

# Subtask 2.3 Subsurface Drilling Program (8 groundwater monitoring wells installed)

A drilling program will be implemented as part of this RI/FS to evaluate the overburden stratigraphy, groundwater quality, and groundwater flow patterns. The results of the previously discussed soil gas investigation (Subtask 1.3 and 2.1) and direct push drilling program (Subtask 1.4 and 2.2), along with information gathered as part of the Subtask 1.5 (Drilling Program) will be used to identify subsequent drilling locations and monitoring well installations as part of the subsurface drilling program included as part of Subtask 2.3. The drilling program will include both shallow and deep overburden drilling and



sampling. It is estimated that a total of 8 borings will be drilled and subsequently completed as groundwater monitoring wells at the Modock Road Springs site. It is expected that 4 of the 8 monitoring wells will be drilled deeper, and paired with a shallow well to form a couplet. These four couplets will be established to evaluate the relationship between the shallow and deep overburden systems.

It is also expected that one to two shallow soil borings will be advanced near the Modock Road Springs and the associated wetland complex. These soil borings will be completed as groundwater monitoring wells to assess the groundwater flow patterns, hydraulic relationship with the wetlands and surface water stream, and the flux of contaminants from the groundwater to the surface water system. It is expected that the soil borings at these locations will be less than 20 feet in depth.

During the drilling program, subsurface soil samples will be collected continuously from each of the soil borings until the target depth is encountered. Drill cuttings will be drummed in accordance with Subtask 2.6. Special attention will be given to examining the interfaces/low permeability zones for the presence of dense non-aqueous phase liquids (DNAPL).

Subsurface soil samples will be collected to obtain information on the characteristics of the overburden material and for submittal to a laboratory for further analysis. The soil samples will be described and logged with respect to their geologic character, features, and properties. The soil will be screened visually for evidence of contamination. In addition, samples will be placed in closed containers (e.g., driller jars) and the headspace will be analyzed using a flame or photo ionization detector. All or some part of any subsurface soil interval extracted from a specific soil boring may be collected as a soil sample for laboratory analysis at the discretion of the Department representative. It is expected that up to 16 additional subsurface soil samples may be collected for laboratory analysis during this drilling program. The soil samples will be sent to an approved laboratory for VOC analysis and in accordance with the NYSDEC Analytical Services Protocol. The selection of subsurface soil materials for laboratory analysis will be made in consultation with the NYSDEC field representative and will be based on:

- Subsurface soil materials that show visual signs of contamination; or
- Subsurface soil materials that cause a sustained response above the measured background response on a calibrated flame or photo ionization screening instrument; or
- A combination of these situations.

The monitoring wells will be installed and developed as described in Tasks 1.5.1 to 1.5.3.



#### Subtask 2.4 Groundwater and Surface Water Sampling

Groundwater samples will be collected during two separate sampling events by Department staff with support from Malcolm Pirnie. In total, approximately 40 wells, including a network of existing monitoring wells, newly installed monitoring wells as part of the Modock Road Springs RI/FS, and existing monitoring wells located at the Syracusa Sand and Gravel property, will be included in the groundwater sampling program. Groundwater samples will be collected using passive diffusion bags (PDBs) with confirmation conventional sampling techniques being employed at twenty percent of the sampling locations.

In addition to the collection of groundwater samples during the completion of Subtask 2.4, a surface water sample will be collected from the Modock Road Springs and four downstream surface water samples will be collected from the wetland complex and the surface water stream that the springs discharge to. Groundwater and surface water samples will be analyzed for VOCs by EPA Method 8260B and in accordance with the NYSDEC ASP during both sampling events.

Prior to the start of both groundwater sampling events, water levels will be collected from the entire monitoring well network to prepare a groundwater contour map and evaluate groundwater flow patterns.

#### Subtask 2.5 Indoor Air Sampling at approximately 15 residences

Follow-up indoor air sampling will be completed as part of the Modock Road Springs RI/FS to further evaluate the migration of vapors into on-site and off-site buildings. The indoor air sampling program will be completed in accordance with the NYSDOH Indoor Air Sampling and Guidance document. Based on the results of the IIWA, it is estimated that vapor intrusion samples will be collected at a total of 15 locations. The overall goal of the indoor air sampling is to evaluate potential human exposure to VOCs known to occur in site soil and groundwater.

At each location, air samples will be collected for laboratory analysis utilizing the TO15 methodology. Air samples will be collected from three locations per sampling point including the basement, first floor, and the subslab environment. An active approach utilizing laboratory certified canisters will be used to evaluate the indoor air and sub-slab soil vapor conditions. The indoor air canisters will be setup during an initial visit, allowed to collect the air samples during a 24 hour period, and then collected at the conclusion of the 24 hour period. Upon collection, the canisters will be sent to the laboratory for analysis.



Prior to initiating the air sampling, the property owners will be contacted through a telephone call and then through a ten-day written notice consistent with NYSDEC TAGM 4053. The Department Project Manager will contact the property owners, discuss the sampling program, and schedule the sampling. The Department Project Manager will provide the consultant with a copy of the correspondence and indoor air sampling schedule.

During the indoor air sampling program, outdoor ambient air samples will be collected. The ambient air samples will be collected at the same time as the indoor air samples and from an evenly spaced location that is representative of outdoor air conditions for the entire sampling area. Quality assurance/quality control samples including duplicates and MS/MSD samples will also be collected during the indoor air monitoring program.

#### Subtask 2.6 Storage and Disposal of Waste

Malcolm Pirnie will be responsible for the proper storage, handling, and disposal of investigative derived waste (IDW) including personal protective equipment, and solids and liquids generated during the well drilling, well development, and well sampling activities. Liquids generated during well drilling, well development, and well sampling will be placed in drums and properly disposed unless there is no visual or olfactory evidence of contamination and it is known that high concentrations of contaminants do not exist. Excess drill cuttings generated from the installation of monitoring wells will also be drummed and the consultant will arrange for proper disposal. All drummed materials will be clearly labeled as to their contents and origin. All IDW will be managed in accordance with DEC-DER TAGM 4032.

#### Subtask 2.7 Data Validation/Determination of Usability

The collection and reporting of reliable data is a primary focus of the sampling and analytical activities. Laboratory and field data will be reviewed to determine the limitations, if any, of the data and to assure that the procedures are effective and that the data generated provides sufficient information to achieve the project objectives. The subconsultant will evaluate the analytical data according to NYSDEC DER Data Usability Summary Report (DUSR) guidelines.

#### Subtask 2.8 Site Survey and Basemap Preparation

As part of Subtask 2.8 and as a follow-up to surveying activities completed as part of the IIWA, a site survey will be completed by a licensed survey. The site survey will include monitoring wells installed by the NYSDEC as part of the RI.



A detailed topographic base map of the site and immediate vicinity will be developed. All relevant features of the site and adjacent areas will be plotted. The site map should include all area important features associated with the investigation (i.e., surface water drainage, above and underground storage tanks, buildings, drywells, cesspools). The base map will be used to accurately plot subsequent sampling locations including soil borings, monitoring wells, and all other sample locations. The tax maps will be reviewed and the property lines of the parcels will be plotted on the base map. The location and elevation of each monitoring well must be surveyed by a New York State licensed surveyor. The elevations of all monitoring well casings should be established to within 0.01 feet based on the NGVD. A permanent reference point should be placed in all interior PVC casings to provide a point to collect future groundwater elevation measurements.

With respect to the site survey and base map preparation, the following assumptions have been made:

- The estimated survey area should include the whole site boundary. All elevations will be referenced to the NAVD 88. All horizontal locations will be referenced to the NAD 83.
- Three blueline copies of the site base maps with topography and three blueline copies of the site basemap, without topography, will be submitted to the Department.
- □ The site map must be provided in AutoCAD, version 12 or higher and ArcMap<sup>TM</sup> 9.1.

### Subtask 2.9 "Qualitative" Health Exposure Assessment

A "qualitative" health exposure assessment will be performed. The assessment will be designed to identify potential exposure pathways of site contaminants to the general public. If deemed necessary, a "quantitative" assessment may be performed in the FS on contaminants of concern and exposure routes of interest. For budget purposes, it should be assumed that a quantitative assessment will not be performed.

Subtask 2.10 Fish & Wildlife Impact Analysis through Step II-B

A Fish and Wildlife Impact Analysis through step II-B will be performed, in accordance with the New York State Department of Environmental Conservation Division of Fish and Wildlife guidance memorandum entitled "Fish and Wildlife Impact Analysis" dated 10/94. If deemed necessary, the Fish and Wildlife Analysis step III will be added during the FS.



#### Subtask 2.11 Remedial Investigation Report Preparation

Malcolm Pirnie will prepare a detailed Remedial Investigation Report. An initial draft with one revision will be submitted to NYSDEC. The report shall also include data gaps, if any, and any need for Interim Remedial Measures (IRMs). The report will include at a minimum:

- Summary of task activities;
- Conceptual site model which includes site operation history, environmental setting, geological description, contamination assessment including a description of the nature and extent of contamination, hydrogeologic model, evaluation of contaminant fate and transport, and the potential public health and environmental concerns;
- Summary tables of physical and analytical results; and
- Conclusions and recommendations.

The findings of the RI will be reduced, analyzed, and made available to NYSDEC and NYSDOH for review. These findings will be used to determine if the collection of additional data is required, if a Supplemental RI is necessary, or if sufficient data exists to start the FS.

Subtask 2.12 Participation in one public meeting at the conclusion of the RI.

The Remedial Investigation/Feasibility Study at the Modock Road Springs site will include participation in one public informational meeting at the conclusion of the RI. NYSDEC will coordinate the meeting and Malcolm Pirnie will present the results of the RI and answer technical questions regarding the methodologies and findings of the RI. Malcolm Pirnie will provide visual aids for the meeting. The visual aids may include large site maps on poster boards, data summary sheets, photographs and/or slides of site activities. Malcolm Pirnie will incorporate information collected by the public agencies into the appropriate RI and/or FS reports.

#### Task 3 - Preparation of Feasibility Study

The major objectives of the FS will be to support an informed risk management decision regarding which remedy appears to be the most appropriate, cost effective, and protective of public health and the environment. The FS will be conducted in accordance with the most recent versions of the 1988 EPA publication "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (EPA/540/G-89/004). If any source areas were located during the RI, Malcolm Pirnie will determine/investigate if there is a need to address the source areas and what is the best way to address the source areas.



#### Subtask 3.1 Standards, Criteria and Guidance (SCGs)

SCGs for each contaminant detected and SCGs necessary for evaluation of remedial actions will be identified and compared to existing conditions on the site.

#### Subtask 3.2 Development of Remedial Action Objectives

Remedial action objectives (RAO's) for all contaminants of concern and affected media will be prepared. The consultant is expected to research appropriate guidance and evaluate background analytical results to determine the RAOs. Guidance to evaluate RAO's includes, but is not limited to, NYSDEC draft "Technical Guidance for Site Investigation and Remediation" (DER-10).

#### Subtask 3.3 Scoping and Development of Remedial Alternatives

A scoping meeting between the Department and the consultant will be held to discuss the remedial alternatives applicable to the site. Based on discussions during this meeting, a brief letter report with the remedial alternatives to be considered for the site along with the conceptual details of the remedial alternative will be submitted to NYSDEC. This will be reviewed by the Department. As per EPA guidance, the FS should be focused.

#### Subtask 3.4 Detailed Analysis

The detailed analysis of the remedial alternatives will include evaluation of the following factors:

- Overall protection of human health and the environment;
- Compliance with SCGs;
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility and volume;
- Short-term effectiveness;
- Implementability; and
- 歷 Cost.

#### Subtask 3.5 FS Report Preparation

The FS report will include discussions of each of these evaluation criteria for each of the alternatives (or technologies) being considered. A summary, including a comparative analysis, will also be included in the report. A preferred remedy that is protective of



public health and the environment, complies to the maximum extent practicable with SCG's and cleanup objectives, reflects a preference for treatment over simple disposal and is cost effective will be recommended. A conceptual plan for implementing the preferred alternative will be prepared and will verify its feasibility. The report should include limited site background and site characterization discussions as this information will be available in the RI report. The discussions should be limited to only the information necessary to justify the findings of the FS. The report will include a conceptual design of the preferred remedy which includes a detailed engineers cost estimate. The FS report must be stamped by a professional engineer in accordance with the New York State Education Law. The consultant is expected to prepare an initial draft and one revision. The consultant will submit three hard copies of the initial report and five hard copies of the final report along with one copy in PDF.

### Subtask 3.6 Proposed Remedial Action Plan (PRAP) and Public Meeting

NYSDEC will prepare a PRAP which describes the preferred remedy. Malcolm Pirnie will provide the tables and figures from RI/FS reports to support the PRAP document, and review and comment on an initial draft of the PRAP. The Department will schedule and lead a public meeting to discuss the findings of the FS. As described in Subtask 2.12, Malcolm Pirnie will attend and present the results of the RI/FS, and provide assistance to NYSDEC with preparation of visual aids.

# 3. Estimated Budget

The estimated project budget is shown in the 2.11 series of schedules, which is provided in Appendix A. These schedules were prepared in accordance with the Malcolm Pirnie Contract for Remedial Investigation Services with the NYSDEC. Schedule 2.11(a), Summary of Work Assignment Price, shows the estimated total price for the work described in this Work Plan. Subcontractor Bids, Subcontractor Cost Backup Memos, Subcontractor Conflict of Interest Forms, Subcontractor Certifications, and Consultant Checklist are provided in Appendices B, C, D, E, and F, respectively.



# 4. Project Staffing Plan

The assignment will be managed through organized efforts of scientific and engineering personnel, and technical resources. These efforts will employ pre-approved field procedures, sampling techniques, and analytical methods to accomplish the project objectives. Effective program organization will accommodate these requirements while maintaining control over these activities.

The organizational team proposed for this project is presented below. In addition to the personnel identified herein, support for the project will be provided by additional personnel from Malcolm Pirnie, and qualified subcontractors, as required. Coordination of project activities and a majority of the work on this project will be performed by staff from Malcolm Pirnie's Latham, New York office. The responsibilities of key staff positions are summarized below.

# 4.1. Proposed Project Staff

The Malcolm Pirnie staff members to be involved in this project include:

Daniel Loewenstein, P.E., Project Officer, will have the final responsibility for the quality of work performed and the allocation of resources and personnel for the assignment.

Shi Ng, the Quality Assurance Officer, will perform project review independently of project management and will oversee Malcolm Pirnie's QA/QC program for the project.

Bruce Nelson, P.G., Project Manager, will be responsible for the allocation of technical and other resources, development of work plans, and implementation of the work. Mr. Nelson will be responsible for maintaining a clear definition of, and adherence to, the NYSDEC-approved scope, schedule, and budget.

Daniel Lang, P.H.G, Deputy Project Manager, will be responsible for the day-to-day management of the project and coordination of project activities, personnel and subcontractors.

Mark Flusche, Deputy Project Manager, will oversee data management and reporting during the project. He will interact with the Project Manager, other team members, and subcontractors.



# 4.2. Proposed Subcontractors

Subcontractors to Malcolm Pirnie will be required to conduct work necessary to support the work assignment, as follows:

- Environmental Laboratories
- Data Validation/Data Usability Reviewer
- Drillers
- Investigation Derived Waste Disposal Firm
- Surveyor

Several proposed subcontractors are New York State Department of Economic Development-certified WBE subcontractors. The MBE/WBE Utilization Plan for this work is provided in Section 6.

# 5. Proposed Project Schedule

The Work Assignment for this project included a project milestone schedule. According to the NYSDEC's project representatives, key milestones include:

- 1. Completion of Work Plan
- 2. Initiation of Field Work
- 3. Completion of Field Work; and
- 4. Reporting of results to NYSDEC.

Achievement of each of these milestone objectives represents an important intermediate step toward beginning the Remedial Action in 2008.

Other project milestones are provided in the following project milestone schedule:

Project Milestone	Day(s)
Work Assignment Authorization	0
Prepare Draft Final PMWP and RI/FS Work Plan	2 – 55
Submit Draft Final PMWP and RI/FS Work Plan	55
Field Studies	14 – 385
Evaluate IRM	100-250
Evaluate Remedial Alternatives	300-460
Summary Report to NYSDEC	490

The schedule does not account for delays due to unforeseen site conditions (e.g., inclement weather, access to residences). Every attempt will be made to adhere to the schedule presented. Unexpected delays will be documented and reported to the NYSDEC in a timely fashion. In the event that the schedule needs to be modified, Malcolm Pirnie will contact the NYSDEC for approval of the updated schedule.



# 6. Proposed Minority-Owned and Women-Owned Business Enterprise Proposed (MBE/WBE) Participation

This MBE/WBE Utilization Plan provides the good faith efforts to be undertaken by Malcolm Pirnie to comply with the requirements of the NYSDEC established in Contract D004443 to subcontract with minority-owned and women-owned business enterprises, and to employ minorities and women. The purpose of the MBE/WBE Plan is to demonstrate and document Malcolm Pirnie's intention to make a good faith effort to meet the goals as stated in the contract. These goals are as follows:

- The Contractor agrees to make good faith efforts to subcontract at least 15 percent of the dollar value of this contract to Minority-Owned Business Enterprises and at least 5 percent of such value to Women-Owned Business Enterprises.
- The Contractor agrees to make good faith efforts to employ or contractually require any Subcontractor with whom it contracts to make good faith efforts to employ minority group members for at least 10 percent of, and women for at least 10 percent of, the work force hours required to perform the work under this Contract.

This MBE/WBE Plan has been prepared to address MBE/WBE involvement in the tasks under NYSDEC Standby Contract No. D004443 for the Modock Road Springs site in the Town of Victor, New York. This specific plan incorporates the provisions of Malcolm Pirnie's corporate plan for Affirmative Action.

#### 6.1. Malcolm Pirnie Affirmative Action Statement

Malcolm Pirnie supports the NYSDECs commitment to minority- and women owned business enterprises. The firm will make good faith efforts to meet or exceed the 15 percent MBE and 5 percent WBE goals for this contract. Malcolm Pirnie is in compliance with Title VII of the Civil Rights Acts of 1964, as amended by the Equal Employment Opportunity Act of 1972.

It is our policy to provide equal opportunity to all qualified persons without regard to race, color, religion, sex, age, national origin, physical handicaps, sexual or affectional preference or marital status, and to promote the full realization of equal opportunity through a positive continuing affirmative action program. The firm assures applicants and staff members that equal opportunity and equal consideration is afforded in personnel



actions with respect to recruiting and hiring, development programs, job assignments, promotion, compensation, transfer, and other status changes.

It is the objective of the firm to provide full employment opportunities for members of minority groups and to employ meaningful numbers at all job levels through effective upgrading and recruiting. Toward this end, the firm's Manager of Human Resources has the responsibility for ensuring that Malcolm Pirnie is in compliance with all aspects of federal and State civil rights laws.

It is the policy of Malcolm Pirnie to consider applicants for employment, training and upward mobility programs that may be necessary without regard to race, religion, color, sex, age, physical handicap or any other factor unrelated to job performance. Malcolm Pirnie also supports career counseling, and training and development for all employees. Minorities and women are encouraged and afforded every opportunity to participate in all company-sponsored educational, training, recreational, professional and social activities.

# 6.2. Areas of Potential MBE/WBE Participation

The tasks identified under this Work Assignment are as follows:

- Task 1 Background Review and Preparation of Work Plans
- ☐ Task 2 Site Investigation

Subcontractors and suppliers are anticipated to be needed to assist or provide supplemental services to Malcolm Pirnie in a number of areas. It is Malcolm Pirnie's intent to solicit MBE/WBEs during the procurement of subcontractors for this project.

One or more MBE/WBE firms will be included in the list of firms solicited for each of the following subcontract areas of work:

- Environmental Laboratory Analysis
- Data Validation/Data Usability Review
- Drilling
- Investigation Derived Waste Disposal
- Surveying



New York State Department of Environmental Conservation Project Management Work Plan

# **Figures**



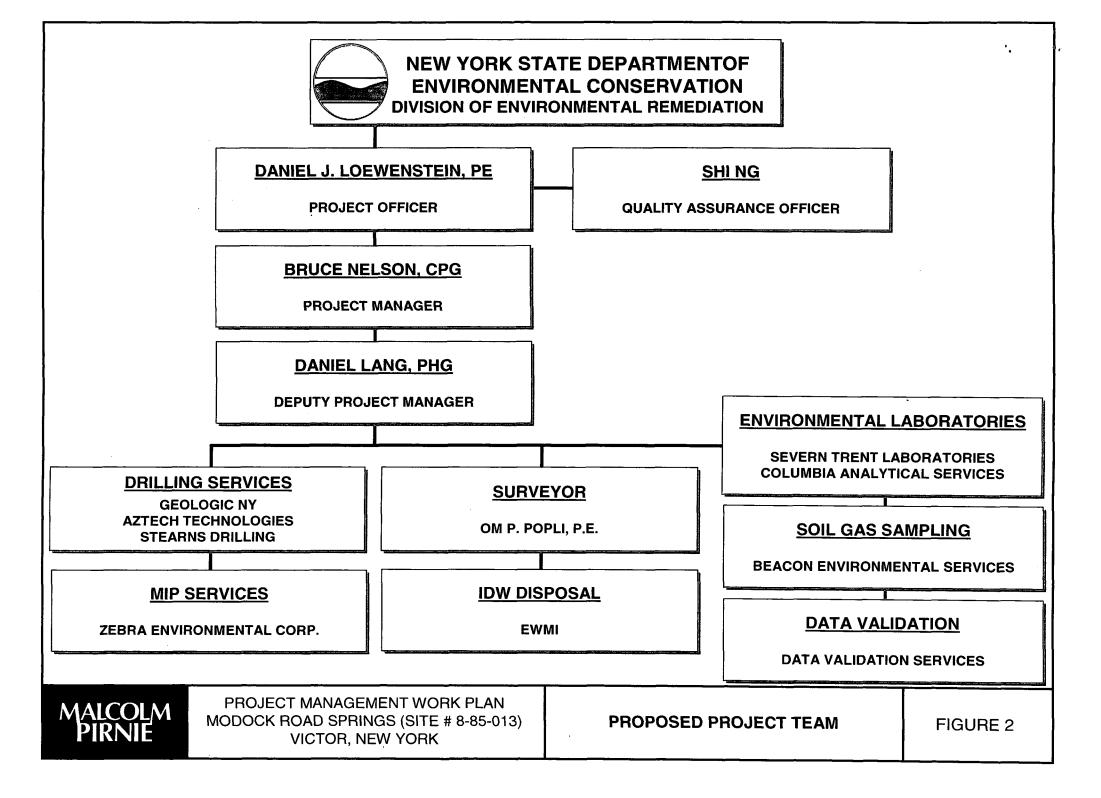




MODOCK ROAD SPRINGS/DLS SAND AND GRAVEL, INC. SITE (HW 8-35-013) VICTOR, NEW YORK

**APPROXIMATE PLUME EXTENT** 

FIGURE 1



New York State Department of Environmental Conservation Project Management Work Plan

# Appendix A: 211 Schedules





# SUMMARY OF WORK ASSIGNMENT PRICE D-004439-9A

Modock Road Springs

rirect Salary Costs [Schedule 2.11(b)]		
ndirect Costs (1.753)		
irect Non-Salary Costs [Schedule 2.11(c)(d)]		
ubcontract Costs:		·
ost-plus-fixed-fee Subcontracts [Schedule 2.11 (e)]		
Name of Subcontractor	Services To Be Performed	Subcontractor Price
		0 \$0
 ubtotal Cost-plus-fixed-fee Subcontracts	0]	\$0
	01	<del></del>
ubtotal Cost-plus-fixed-fee Subcontracts	Services To Be Performed	<del></del>
ubtotal Cost-plus-fixed-fee Subcontracts  nit Price Subcontracts [Schedule 2.11(f)]	Services To Be Performed Air Analytical	Subcontractor Price \$12,530
nit Price Subcontracts [Schedule 2.11(f)]  Name of Subcontractor		Subcontractor Price
nit Price Subcontracts [Schedule 2.11(f)]  Name of Subcontractor  [Laboratory - Chemtech (MBE)	Air Analytical	Subcontractor Price \$12,530 \$14,875 \$5,885
nit Price Subcontracts [Schedule 2.11(f)]  Name of Subcontractor  Laboratory - Chemtech (MBE)  Laboratory - STL	Air Analytical Soil and GW Analytical Data Validation Geoprobe Drilling	Subcontractor Price \$12,530 \$14,875
nit Price Subcontracts [Schedule 2.11(f)]  Name of Subcontractor  Laboratory - Chemtech (MBE)  Laboratory - STL  Data Validation - Data Validation Services (WBE)	Air Analytical Soil and GW Analytical Data Validation	\$0 Subcontractor Price \$12,530 \$14,875 \$5,885 \$6,206 \$28,054
nit Price Subcontracts [Schedule 2.11(f)]  Name of Subcontractor  Laboratory - Chemtech (MBE)  Laboratory - STL  Data Validation - Data Validation Services (WBE)  Springs Geoprobe - Aztech Technologies (WBE)	Air Analytical Soil and GW Analytical Data Validation Geoprobe Drilling Soil Gas Analysis Sonic Drilling	\$0 Subcontractor Price \$12,530 \$14,875 \$5,885 \$6,206 \$28,054 \$119,010
nit Price Subcontracts [Schedule 2.11(f)]  Name of Subcontractor  Laboratory - Chemtech (MBE) Laboratory - STL Data Validation - Data Validation Services (WBE) Springs Geoprobe - Aztech Technologies (WBE) Soil Gas Analysis - Beacon Environmental Services Inc. Sonic Drilling - Stearns Drilling MIP Drilling - Zebra Environmental	Air Analytical Soil and GW Analytical Data Validation Geoprobe Drilling Soil Gas Analysis Sonic Drilling MIP Drilling	\$0  Subcontractor Price \$12,530 \$14,875 \$5,885 \$6,206 \$28,054 \$119,010 \$26,350
nit Price Subcontracts [Schedule 2.11(f)]  Name of Subcontractor  Laboratory - Chemtech (MBE) Laboratory - STL  Data Validation - Data Validation Services (WBE)  Springs Geoprobe - Aztech Technologies (WBE)  Soil Gas Analysis - Beacon Environmental Services Inc. Sonic Drilling - Stearns Drilling	Air Analytical Soil and GW Analytical Data Validation Geoprobe Drilling Soil Gas Analysis Sonic Drilling	\$0 Subcontractor Price \$12,530 \$14,875 \$5,885 \$6,206 \$28,054 \$119,010

Geoprobe Drilling

Field Work Assistance

Survey

6. Subcontract Management Fee \$12,199

7. Total Subcontract Costs (lines 4+5+6)

K. Survey - Om P Popli (MBE)

Total Unit Price Subcontracts

L. Larsen Engineers- Field Crew (MBE)

\$259,277

\$19,200

\$3,688

\$8,180

\$247,078

8. Fixed Fee

\$21,476

9. Total Work Assignment Price (lines 1+2+3+7+8)

J. DLS Property Geoprobe - Geologic NY (WBE)

\$520,574

#### SCHEDULE 2.11 (b) - Tasks 1 through 4

# SUMMARY TOTAL OF DIRECT LABOR HOURS D-004439-9A Modock Road Springs

	NSPE Labor Classification	9	8	7	6	5	4	3	2	1	Tech	
	Average 2007 Rate	\$65.98	\$65.98	\$55.81	\$42.30	\$36.01	\$32.84	\$28.14	\$24.56	\$20.10	\$13.69	
	Average 2008 Rate	\$67.96	\$67.96	\$57.48	\$43.57	\$37.09	\$33.83	\$28.98	\$25.30	\$20.70	\$14.10	100880198889909999999999888888888888888
	Average 2009 Rate	\$70.00	\$70.00	\$59.20	\$44.88	\$38.20	\$34.84	\$29.85	\$26.06	\$21.32	\$14.52	
Task #	Task Name			Total D	irect Labor H	ours by Task	for each NSP	E Labor Classi	fication			Total Direct Labor Hours Budgeted
Task l	Work Plan Preparation	5	51	66	2	0	8	240	275	2	130	779
Task 2	Site Investigation	2	91	114	0	8	0	465	391	20	370	1,461
Task 3	Feasibility Study	8	49	65	0	0	0	145	58	20	0	345
	Subtotals:							•				TOTALS:
	2007 hours:	6	126	156	2	4	8 .	555	546	22	430	1,855
	2007 costs:	\$395.88	\$8,313.48	\$8,706.36	\$84.60	\$144.04	\$262.72	\$15,617.70	\$13,409.76	\$442.20	\$5,886.70	\$53,263.44
	2008 hours:	9	65	. 89	0 .	4	0	295	178	20	70	730
	2008 costs:	\$611.64	\$4,417.40	\$5,115.72	\$0.00	\$148.36	\$0.00	\$8,549.10	\$4,503.40	\$414.00	\$987.00	\$24,746.62
	2009 hours:	0	0	0	0	. 0	0	0	0	0	0	0
	2009 costs:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total W	ork Assignment Hours	15	191	245	2	. 8	8	850	724	42	500	2,585
Total Co	ost for Each NSPE Level	\$1,007.52	\$12,730.88	\$13,822.08	\$84.60	\$292.40	\$262.72	\$24,166.80	\$17,913.16	\$856.20	\$6,873.70	
Total W	ork Assignment Direct Labor Cost											\$78,010.06

#### SCHEDULE 2.11 (b) - Tasks 1 through 3

# SUMMARY TOTAL OF DIRECT LABOR HOURS D-004439-9A Modock Road Springs

							IWORK	/SHEET	- Not to	he suhm	ittadl					
Task#_	NSPE Labor Classification Task Name				9	8	7	6	5	4	3	2	1	Tech	Total No. Direct Labor Hours Budgeted	Direct Labor Cost
Task l	Work Plan Preparation	l			5	51	66	2	0	8	240	275	2	130	779	\$23,053.16
				2007	5	51	66	2	0	8	240	275	. 2	130	779	\$23,053.16
				2008	0	0	0	0	0	0	0	0	0	0	0	\$0.00
				2009	0	0	0 .	0	0	0	0	0	0	0	0	\$0.00
Task 2	Site Investigation				2	91	114	0	8	0	465	391	20	370	1,461	\$41,263,48
				2007	1	75	90	.0	4	0	315	271	20	300	1,076	\$30,210.28
				2008	. 1	16	24	0	- 4	0	150	120	. 0	70	385	\$11,053.20
				. 2009	0	0	0	0.	0	0	0 .	0	0	0	0	\$0.00
Task 3	Feasibility Study				8	49	65	0	0	0	145	58	20	0	345	\$13,693.42
				2007	0	0	0	0	0	0	0	0	0	0	0	\$0.00
				2008		49	65	0	0	0	145	58	20	0	345	\$13,693.42
		,,		2009	0	0	0	0	0	0	0	0	0	0	0	\$0.00
		Subtotal	2007	Hours	6	126	156	2	4	8	555	546	22	430	1,855	
		Subtotal	2008	Hours	9	65	89	0	4	0	295	178	20	70	730	
		Subtotal	2009	Hours	0	0	0	0	0	0	0	0	0	0	0	
Total ho	ours				15	191	245	2	8	8	850	724	42	500	2,585	\$78,010.06
		Average	2007	Rate	\$65.98	\$65.98	\$55.81	\$42.30	\$36.01	\$32.84	\$28.14	\$24.56	\$20.10	\$13.69		\$53,263.44
		Average	2008	Rate	\$67.96	\$67.96	\$57.48	\$43.57	\$37.09	\$33.83	\$28.98	\$25.30	\$20.70	\$14.10		\$24,746.62
		Average	2009	Rate	\$70.00	\$70.00	\$59.20	\$44.88	\$38.20	\$34.84	\$29.85	\$26.06	\$21.32	\$14.52		\$0.00
Total D	irect Labor Cost															\$78,010.06

# SCHEDULE 2.11 (b-1) - Tasks 1 through 4

# SUMMARY TOTAL OF DIRECT ADMINISTRATIVE LABOR HOURS

D-004439-9A Modock Road Springs

NSPE Labor Classification	9	8	7	6	5	4	3	2	1	
Average 2007 Rate	\$65.98	\$65.98	\$55.81	\$42.30	\$36.01	\$32.84	\$28.14	\$24.56	\$20.10	
TASK		Total D	irect Admin	istrative Hou	ers by Task i	or each NSPI	E Labor Cla	ssification		Total Direct Administrative Hours
Task I	. 0	7	0	2	0	· 8	. 0	. 5	2	24
Task 2	0	35	0	0	0	0	0	51	20	106
Task 3	0	9	0	. 0	0	0	0	8	10	27
Subtotals:	·					*				TOTALS:
2007 Task 1 Costs	\$0.00	\$461.86	\$0.00	\$84.60	\$0.00	\$262.72	\$0.00	\$122.80	\$40.20	\$972.18
2007 Task 2 Costs	\$0.00	\$2,309.30	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,252.56	\$402.00	\$3,963.86
2007 Task 3 Costs	\$0.00	\$593.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$196.48	\$201.00	\$991.30
2007 Costs	\$0.00	\$3,364.98	\$0.00	\$84.60	\$0.00	\$262.72	\$0.00	\$1,571.84	\$643.20	\$5,927.34
Total Hours	0	51	0	2	0	8	0	64	32	157
Total Cost (NSPE Level)	\$0.00	\$3,364.98	\$0.00	\$84.60	\$0.00	\$262.72	\$0.00	\$1,571.84	\$643.20	
Total Work Assignment Dir	ect Admini	strative Cost		<u></u>						\$5,927.34

Engineer/Contract Number: Malcolm Pirnie / D-004439

Project Name:

Modock Road Springs

Work Assignment Number:

WA-9A

#### DETAILED BREAKDOWN OF

#### DIRECT ADMINISTRATIVE LABOR HOURS BUDGETED ON SCHEDULE 2-11(b-1)

[WORKSHEET - to be sent with Work Plan, but separately]

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NSPE		I																١	I				I			Г	Ī																			I				Ι.						Ι	I					I					
Level	9	1	8	7	6	Ľ	Ļ	4	31	2	1	9_	4	8	7	6	Ľ	Ļ	4	3	2	L	1	Ģ	8	Ļ	7	6	. 3	Ľ	+	3	2	_	Ľ	<u>'</u>	8	4	6		4	4	3		Υ'	4	٩ļ	8	7	Ļ	4	1	4	3	_2	+	4	9	8	7	ϰ	F	4	4	3	2	Ľ
Task 1	L					L	L	l	$\perp$			L	$\perp$	2		2	L	L	8				1		1	L				L	1	╛	,		L	┸	<u>. </u>	╛			Ţ	1		Ĺ	L	1	1			L					L	$\perp$	1		2	L	L	L	1	1		_	L
Task 2							1										ļ								6					ļ			4				6							4				2		L		1			2	يا	1		18	L							L
Task 3																									2							_	1				2																						4								L
Subtotal	o	۰	0	0	0	(		٥	٥	.0	0	ď	,	2	0	2	ď	$\cdot $	8	0	0	L	a	0	9	I	٥	0	٥	Ţ	Ţ	٥	6	0		0	9	0	0	•	,	0	0	(	T	,	0	2	0	ļ	,	0	o	0	2	į	0	0	24	0	0		,	٥	0	٥	0
TOTAL						(	)					Γ					13	!							-				15											t	5			-								4										2	1				

**Date Prepared:** 10/11/2007

Engineer/Contract Number:

Malcolm Pirnie / D-004439

Project Name:

Modock Road Springs

Work Assignment Number:

<u>WA-9A</u>

Date Prepared:

10/11/2007

#### DETAILED BREAKDOWN OF

#### DIRECT ADMINISTRATIVE LABOR HOURS BUDGETED ON SCHEDULE 2-11(b-1)

[WORKSHEET - to be sent with Work Plan, but separately]

							C.	A.P.	. Р	REF	'nR	ΑTI	ОИ													,	MIS	CEL	LAN	EO	US									٧	Vord	Proc	cess	ing			1							TOTA	L					
ADMIN. TASKS				-			thly						Οv	erse	e C	AP P	repa	ratio	n,			•	NS	SPE I	List	Upda	ates	٠			. 1	-	-	nt Us		d				R		and Prej		ition									DIRE	CT A						
NSPE Level	9	8	, .	,	6	5	4	3	2		Į,	, ,		7	6	5	4	3	2	1	9	8	7	6	5	4	3	2		,	8	7	6	5		2		9	8	7	6	5		4	3 7	2	,	,	,	8		,	6		Ţ	4	3		2	
Task I			I	I	I				3			L	I																														Ι		Ι	Ι	2	. (	0	7		0	2			8	0		5	2
Task 2			$\perp$	$\perp$	1				40	L	L	2	,									ı												1				L						1			20	(	٥	35	L	в	0		,	0	0	5	,	20
Task 3			Ì						6				1								,																										10	(	0	Ģ		0	0		,	0	0		8	10
Subtotal	0	0	9		0	0	0	0	49	0		، [ه	4	0	٥	0	0	0	0	0	0	ι	0	0	0	0	0	,	0	0	0	0	0	٥	0	0	0	0	0	0	0	0	<u>,                                    </u>	0	0	0	32		0	51		0	2		,	8	0	6	4	32
TOTAL						49										4				·					2									0								32	2											15	,					

# DETAILED BREAKDOWN OF DIRECT NON-SALARY COSTS

D-004439-9A

Modock Road Springs

	Maximum	Estimated		Total
1			Pating 4	Total
T.	Reimbursement	Number	Estimated	Estimated
Item	Rate	of Units	Cost	Cost
Task 1			Work P	lan Preparation
Travel & Subsistence				
1 Mileage (2007)	\$0.485 /mile	4,500 miles	\$2,182.50	
2 Subsistence	At Cost	At Cost	\$0.00	•
3 Per diem (full day)	\$131 /day	15 days	\$1,965.00	
4 Per Diem (1st day & lodging)	\$120 /day	20 days	\$2,400.00	
5 Per Diem (last day & 75% meals)	\$33 /day	20 days	\$660,00	\$7,207.50
Other Direct Costs				
1 Reproduction	\$0.06 /page	0 copies	\$0.00	
2 Mail	At Cost	At Cost	\$500.00	
3 Communication	At Cost	At Cost	\$0.00	\$500.00
		TOTAL -	Task 1	\$7,70.7.50
Task 2			Si	ite Investigation
Travel & Subsistence				
1 Mileage (2007)	\$0.485 /mile	4,500 miles	\$2,182.50	
2 Subsistence	At Cost	At Cost	\$0.00	
3 Per diem (full day)	\$131 /day	15 days	\$1,965.00	
4 Per Diem (1st day & lodging)	\$120 /day	20 days	\$2,400.00	
5 Per Diem (last day & 75% meals)	\$33 /day	_20 days	\$660.00	\$7,207.50
Other Direct Costs				
1 Reproduction	\$0.06 /page	0 copies	\$0.00	
		•		
2 Mail	At Cost	At Cost	\$1,000.00	
		At Cost At Cost	\$1,000.00 \$0.00	\$1,000.00

Task 3			Fe	asibility Study
Travel & Subsistence				
1 Mileage (2007)	\$0.485 /mile	900 miles	\$436.50	
2 Subsistence	At Cost	At Cost	\$0.00	
3 Per Diem (full day)	\$131 /day	0 days	\$0.00	
3 Per Diem (first day & loging)	\$120 /day	4 days	\$480.00	
3 Per Diem (last day & 75% meals)	\$33 /day	4 days	\$132.00	\$1,048.50
Other Direct Costs				
1 Reproduction	\$0.06 /page	0 copies	\$0.00	
2 Mail	At Cost	At Cost	\$100.00	
3 Communication	At Cost	At Cost	\$0.00	\$100.00
		TOTAL - 1	Task 3	\$1,148.50

11 00 00 00 00 00 00 00 00 00 00 00 00 0	 		#17 ACA AA
TOTAL ALL Tables			\$17.064.00 <b>•</b>
TOTAL - All Tasks			\$17,064.00
10.112 1111 13013	 	 	

# Schedule 2.11 (c)

# DIRECT NON-SALARY COSTS

D-004439-9A

Modock Road Springs

	Maximum	Estimated		Total
•	Reimbursement	Number	Estimated	Estimated
Item	Rate	of Units	Cost	Cost
In-house				
Mail	At Cost	At Cost	\$1,600.00	\$1,600.00
Miscellaneous				
Per Diem (full day)	\$131.00 /day	30 days	\$3,930.00	
Per Diem (first day & loging)	\$120.00 /day	44 days	\$5,280.00	
Per Diem (last day & 75% meals)	\$33.00 /day	44 days	\$1,452.00	
Mileage(2007)	\$0.485 /mile	9,900 miles	\$4,801.50	\$15,463.50
TOTAL				\$17,064.00

# **Shedule 2.11 (d)**

# SUMMARY OF EQUIPMENT ACTIVITY D-004439-9A

D-004439-9A Modock Road Springs

SCHEDULE	Task 1	Task 2	Task 3	Task 4	Total Budgeted Cost	
Schedule 2.11(d)1 - Department Purchased Equipment	\$0	\$0	\$0	\$0	\$0	
Schedule 2.11(d)2 - Malcolm Pirnie Owned	\$897	\$1,229	\$0	\$0	\$2,125	
Schedule 2.11(d)3 - Rented Equipment	\$0	\$1,740	\$0	\$0	\$1,740	
Schedule 2.11(d)4 - Site Dedicated Equipment	\$0	\$0	\$0	\$0	\$0	
Schedule 2.11(d)5 - Consumable Supplies	\$1,440	\$2,690	\$0	\$0	\$4,130	
TOTAL	\$2,337	\$5,659	\$0	( <u></u> )	\$7,995	

# EQUIPMENT PURCHASED UNDER THE CONTRACT

D-004439-9A

Modock Road Springs

ltem	Estimated Purchase Price	O&M Rate	Estimated Number	Estimated Usage Cost
Total - All Tasks				

# MAXIMUM REIMBURSEMENT RATES - CONSULTANT OWNED EQUIPMENT

D-004439-9A Modock Road Springs

Item	O&M Rate	Estimated Usage	Estimated Usage Cost
Photoionization Detector (Task 1)	\$45 /day	15 days	\$675.00
Peristaltic Pump (Task 1)	\$15 /day	0 days	\$0.00
Low Value Equipment (Task 1)	\$0.80 /person field	1 /// ከለነነተና	\$221.60
Task 1 Total	· ·		\$896.60
Photoionization Detector (Task 2)	\$45 /day	20 days	\$900.00
Peristaltic Pump (Task 2)	\$15 /day	0 days	\$0.00
Low Value Equipment (Task 2)	\$0.80 /perso	I AII nours	\$328.80
Task 2 Total			\$1,228.80
Low Value Equipment (Task 3)	\$0.80 /perso	I (I nonre	\$0.00
Task 3 Total			\$0.00
Total All Tasks	,		\$2,125.40

# MAXIMUM REIMBURSEMENT RATES - VENDER RENTED EQUIPMENT\*

D-004439-9A

Modock Road Springs

Item	Unit Price	Quantity	Total Budgeted Cost	
ppbRae (Task 2)	\$350.00 /week	4 week	\$1,400.00	
Horiba U-10 (Task 2)	\$170.00 /week	2 week	\$340.00	
	\$0.00 /lump sum	0 lump sum	\$0.00	
Total			\$1,740.00	

<sup>\*</sup> Reimbursement will be paid at the actual receipted rental cost

# MAXIMUM REIMBURSEMENT RATES - SITE-DEDICATED EQUIPMENT

D-004439-9A Modock Road Springs

Item	Unit Price	Quantity	Total Estimated Cost
			\$0.00
			\$0.00
			\$0.00

Total \$0.00

#### DETAILED BREAKDOWN OF CONSUMABLE SUPPLIES\*

D-004439-9A

Modock Road Springs

			Total	
Item	Unit Price	Quantity	Budgeted Cos	
Task 1	·			
Miscellaneous Supplies (Up to \$1,000 total)**	\$200.00 Lump Sum	1 Lump Sum	\$200.00	
Aerial Photographs	\$290.00 Lump Sum	l Lump Sum	\$290.00	
PPE Level D	\$19.00 /man - day	50 /man - day	\$950.00	
Total - Task 1			\$1,440.00	
Task 2				
Miscellaneous Supplies (Up to \$1,000 total)**	\$600.00 Lump Sum	1 Lump Sum	\$600.00	
Passive Diffusion Bags	\$28.50 /bag	40 bags	\$1,140.00	
PPE Level D	\$19.00 /man - day	50 /man - day	\$950.00	
Total - Task 2			\$2,690.00	
Task 3				
Miscellaneous Supplies (Up to \$1,000 total)**	\$200.00 Lump Sum	0 Lump Sum	\$0.00	
Total - Task 3			\$0.00	
ГОТАL			\$4,130.00	

Note: Consumable supplies such as gas, diesel fuel, oil, film, stakes, ice, distilled water, rope shall be direct billed with appropriate receipts.

#### Schedule 2.11 (e)

# SUMMARY OF COST-PLUS-FIXED-FEE SUBCONTRACTORS D-004439-9A

Modock Road Springs

	Services To		S			
ltem	Be Performed					
		Task I	Task 2	Task 3	Task 4	Tota
1.		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2.		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
3.		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SUBTOTAL		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Management Fee						
1.		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2.		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
3.		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MANAGEMENT FEE SUBTOTAL		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TOTAL		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

#### Schedule 2.11 (f)

#### SUMMARY OF UNIT PRICE SUBCONTRACTORS D-004439-9A Modock Road Springs

	Nem	Services To  Be Performed				Management Fee (5%)				
			Task 1	Task 2	Task 3	Total	Task 1	Task 2	Task 3	Total
1.	Laboratory - Chemtech (MBE)	Air Analytical	\$0.00	\$12,530.00	\$0.00	\$12,530.00	\$0.00	\$627.00	\$0.00	\$627.00
2.	Laboratory - STL	Soil and GW Analytical	\$6,265.00	\$8,610.00	\$0.00	\$14,875.00	\$313.00	\$431.00	\$0.00	\$744.00
3.	Data Validation - Data Validation Services (WBE)	Data Validation	\$1,760.00	\$4,125.00	\$0.00	\$5,885.00	\$88.00	\$206.00	\$0.00	\$294.00
4.	Springs Geoprobe - Aztech Technologies (WBE)	Geoprobe Drilling	\$6,206.00	\$0.00	\$0.00	\$6,206.00	\$310.00	\$0.00	\$0.00	\$310.00
5.	Soil Gas Analysis - Beacon Environmental Services Inc.	Soil Gas Analysis	\$16,900.00	\$11,154.00	\$0.00	\$28,054.00	\$845.00	\$558.00	\$0.00	\$1,403.00
6.	Sonic Drilling - Stearns Drilling	Sonic Drilling	\$54,130.00	.\$64,880.00	\$0.00	\$119,010.00	\$2,706.50	\$3,244.00	\$0.00	\$5,950.50
7.	MIP Drilling - Zebra Environmental	MIP Drilling	\$26,350.00	\$0.00	\$0.00	\$26,350.00	\$1,317.50	\$0.00	\$0.00	\$1,317.50
8.	IDW - EWMI	IDW Disposal	\$0.00	\$3,100.00	\$0.00	\$3,100.00	\$0.00	\$0.00	\$0.00	\$0.00
9.	DLS Property Geoprobe - Geologic NY (WBE)	Geoprobe Drilling	\$9,600.00	\$9,600.00	\$0.00	\$19,200.00	\$480.00	\$480.00	\$0.00	\$960.00
10.	. Survey - Om P Popli (MBE)	Survey	\$0.00	\$3,688.00	. \$0.00	\$3,688.00	\$0.00	\$184.00	\$0.00	\$184.00
11.	Larsen Engineers- Field Crew (MBE)	Field Work Assistance	\$0.00	\$8,180.00	\$0.00	\$8,180.00	\$0.00	\$409.00	\$0.00	\$409.00
	TOTAL		\$121,211.00	\$125,867.00	\$0.00	\$247,078.00	\$6,060.00	\$6,139.00	\$0.00	\$12,199.00

# Table 2.11 (f-1)

#### DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A

Modock Road Springs

#### Laboratory - Chemtech (MBE)

Task	Parameter	Method	Matrix	No. of Tests	Unit Rate (\$)	(1)	Total
Task 1	VOC	TO-15	Indoor, Ambient Air, & Soil Vapor	0	179.00		\$0.00
SUTO	TAL - Task 1						\$0.00
MANA	GEMENT FEE (TASK	1)					\$0.00
SUBTO	OTAL - Task 1 (INCLUI	ING MANAGEM	ENT FEE)				\$0.00
Task 2	voc	TO-15	Indoor, Ambient Air, & Soil Vapor	70	179.00		\$12,530.00
SUTO	TAL - Task 2						\$12,530.00
MANA	GEMENT FEE (TASK	2)					\$627.00
SUBTO	OTAL - Task 2 (INCLUI	ING MANAGEM	ENT FEE)				\$13,157.00
TOTAI	L FOR ALL TASKS (IN	CLUDING MANA	GEMENT FEE)				\$13,157.00

Note: These costs assume a standard turn around time.

# Table 2.11 (f-2)

#### DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A

Modock Road Springs

#### Laboratory - STL

Task	Parameter	Method	Matrix	No. of Tests	Unit Rate (\$)	Total (\$)
Task 1	VOC	8260B	Soil	54	70.00	\$3,780.00
Task 1	VOC (2-Day Turn)	8260B	Soil	6	87.50	\$525.00
Task 1	VOC	8260B	Groundwater	28	70.00	\$1,960.00
SUTOTAL -	Task 1					\$6,265.00
MANAGEM	ENT FEE (TASK 1)					\$313.00
SUBTOTAL	- Task 1 (INCLUDING M.	ANAGEMENT I	FEE)			\$6,578.00
Task 2	VOC	8260B	Soil	60	70.00	\$4,200.00
Task 2	VOC	8260B	Groundwater	63	70.00	\$4,410.00
SUTOTAL -	Task 2	<u> </u>				\$8,610.00
MANAGEM	ENT FEE (TASK 2)					\$431.00
SUBTOTAL	- Task 2 (INCLUDING MA	ANAGEMENT I	FEE)			\$9,041.00
TOTAL FOR	R ALL TASKS (INCLUDIN	IG MANAGEM	ENT FEE)			\$15,619.00

Note: Unless noted, these costs assume a standard turn around time.

Note: Maintenance fee assessed because total subcontract is greater than \$10,000.

# Table 2.11 (f-3)

#### DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A Modock Road Springs

Data Validation - Data Validation Services (WBE)

Item	Unit Cost	No. of Items	<b>Total Cost</b>
Task 1			· · · · · · · · · · · · · · · · · · ·
Data Validation - Soil	\$20.00 /sample	60 samples	\$1,200.00
Data Validation - Groundwater	\$20.00 /sample	28 samples	\$560.00
Data Validation - Air	\$25.00 /sample	0 samples	\$0.00
Data Validation - Soil Vapor	\$30.00 /sample	0 samples	\$0.00
SUTOTAL - Task 1			\$1,760.00
MANAGEMENT FEE (TASK 1)	\$88.00		
SUBTOTAL - Task 1 (INCLUDING	\$1,848.00		
Task 2			
Data Validation - Soil	\$20.00 /sample	60 samples	\$1,200.00
Data Validation - Groundwater	\$20.00 /sample	63 samples	\$1,260.00
Data Validation - Air	\$25.00 /sample	45 samples	\$1,125.00
Data Validation - Soil Vapor	\$30.00 /sample	18 samples	\$540.00
SUTOTAL - Task 2			\$4,125.00
MANAGEMENT FEE (TASK 2)	\$206.00		
SUBTOTAL - Task 2 (INCLUDING	G MANAGEMENT FEI	E)	\$4,331.00 `
TOTAL FOR ALL TASKS (INCL	UDING MANAGEMEN	T FEE)	\$6,179.00

Note: These costs assume a standard turn around time.

# Table 2.11 (f-4)

# DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A

Modock Road Springs

# Springs Geoprobe - Aztech Technologies (WBE)

Item	Unit Cost	No. of Items	Total Cost
Task 1			
Springs Geoprobe Day Rate	\$1,300.00 day	2 days	\$2,600.00
Overtime	\$195.00 hour	4.25 hours	\$829.00
Mobilization/Demobilization	\$1,360.00 LS	1	\$1,360.00
Per Diem	\$200.00 day	2 days	\$400.00
Direct Push Expendables	\$1.50 each	195	\$293.00
1" PVC Well Installation	\$5.75 foot	64 feet	\$368.00
6" Curb Box	\$89.00 each	4 boxes	\$356.00
SUTOTAL - Task 1			\$6,206.00
MANAGEMENT FEE (TASK 1)			\$310.00
SUBTOTAL - Task 1 (INCLUDIN	NG MANAGEMENT FEE	)	\$6,516.00
TOTAL FOR ALL TASKS (INCI	JUDING MANAGEMEN'	r fee)	\$6,516.00

# Table 2.11 (f-5)

# DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A Modock Road Springs

# Soil Gas Analysis - Beacon Environmental Services Inc.

Item	Unit Cost	No. of Items	Total Cost	
Task 1				
8260B Analysis	\$169.00 sample	100 samples	\$16,900.00	
SUTOTAL - Task 1			\$16,900.00	
MANAGEMENT FEE (TAS	ANAGEMENT FEE (TASK 1) BTOTAL - Task 1 (INCLUDING MANAGEMENT FEE)			
SUBTOTAL - Task 1 (INCL	\$17,745.00			
Task 2				
8260B Analysis	\$169.00 sample	66 samples	\$11,154.00	
SUTOTAL - Task 2			\$11,154.00	
MANAGEMENT FEE (TAS	K 2)		\$558.00	
SUBTOTAL - Task 2 (INCL	UDING MANAGEMENT FEE)		\$11,712.00	
TOTAL FOR ALL TASKS (	INCLUDING MANAGEMENT I	FEE)	\$29,457.00	

# Table 2.11 (f-6)

#### DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A Modock Road Springs

# Sonic Drilling - Stearns Drilling

Item	Unit (	Cost	No. of Items	Total Cost
Task 1				
Mobilization/Demobilization	\$11,000.00	LS	1	\$11,000.00
Decon Pad	\$500.00	LS	1	\$500.00
Sonic Drilling	\$40.00	linear foot	720 feet	\$28,800.00
Monitoring Well Installation	\$23.00	linear foot	540 feet	\$12,420.00
Stick-up casing	\$235.00	each	6 wells	\$1,410.00
SUTOTAL - Task 1				\$54,130.00
MANAGEMENT FEE (TASK 1	\$2,706.50			
SUBTOTAL - Task 1 (INCLUD)	\$56,836.50			
Task 2		·		
Mobilization/Demobilization	\$11,000.00	LS	1	\$11,000.00
Decon Pad	\$500.00	LS	1	\$500.00
Sonic Drilling	\$40.00	linear foot	800 feet	\$32,000.00
Drums	\$55.00	drum	20 drums	\$1,100.00
Monitoring Well Installation	\$23.00	linear foot	800 feet	\$18,400.00
Stick-up casing	\$235.00	each	8 wells	\$1,880.00
SUTOTAL - Task 2				\$64,880.00
MANAGEMENT FEE (TASK 2	)			\$3,244.00
SUBTOTAL - Task 2 (INCLUDI	NG MANAGE	MENT FEE)		\$68,124.00
TOTAL FOR ALL TASKS (INC	LUDING MAN	AGEMENT	FEE)	\$124,960.50

# Table 2.11 (f-7)

#### DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A Modock Road Springs

# MIP Drilling - Zebra Environmental

Item	Unit Cost	No. of Items	Total Cost		
Task 1					
Mobilization/Demobilization	\$1,450.00 LS	1	\$1,450.00		
MIP Day Rate	\$3,900.00 day	6 days	\$23,400.00		
Per Diem	\$250.00 day	6 days	\$1,500.00		
SUTOTAL - Task 1					
MANAGEMENT FEE (TASK 1)	,		\$1,317.50		
SUBTOTAL - Task 1 (INCLUDII	NG MANAGEMENT FE	E)	\$27,667.50		
TOTAL FOR ALL TASKS (INC)	LUDING MANAGEMEN	T FEE)	\$27,667.50		

# Table 2.11 (f-8)

#### DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A Modock Road Springs

IDW - EWMI

Item	Unit Cost	No. of Items	Total Cost
Task 1			
Disposal (soil)	\$0.00 /DRUM	15	\$0.00
Disposal (groundwater)	\$0.00 /DRUM	5	\$0.00
Drum Transportation	\$0.00 /LS	1	\$0.00
SUBTOTAL - Task 1			\$0.00
MANAGEMENT FEE (TAKS 1)			\$0.00
SUBTOTAL - Task 1 (INCLUDING	MANAGEMENT FEE)		\$0.00
Task 2	· ·		
Disposal (soil)	\$95.00 /DRUM	15	\$1,425.00
Disposal (groundwater)	\$95.00 /DRUM	5	\$475.00
Drum Transportation	\$1,200.00 /LS	1	\$1,200.00
SUTOTAL - Task 2	·	·	\$3,100.00
MANAGEMENT FEE (TAKS 2)			\$0.00
SUBTOTAL - Task 2 (INCLUDING	MANAGEMENT FEE)		\$3,100.00
TOTAL FOR ALL TASKS (INCLU	DING MANAGEMENT FE	E)	\$3,100.00

# Table 2.11 (f-9)

#### DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439-9A Modock Road Springs

# DLS Property Geoprobe - Geologic NY (WBE)

Item	Unit Cost	No. of Items	Total Cost
Task I			
DLS Geoprobe Day Rate	\$1,800.00 day	5 days	\$9,000.00
Per Diem	\$0.00 day	5 days	\$0.00
Mobilization/Demobilization	\$600.00 LS	1	\$600.00
SUTOTAL - Task 1	\$9,600.00		
MANAGEMENT FEE (TASK 1)	\$480.00		
SUBTOTAL - Task 1 (INCLUDI)	\$10,080.00		
Task 2			
DLS Geoprobe Day Rate	\$1,800.00 day	5 days	\$9,000.00
Per Diem	\$0.00 day	5 days	\$0.00
Mobilization/Demobilization	\$600.00 LS	1	\$600.00
SUTOTAL - Task 2			\$9,600.00
MANAGEMENT FEE (TASK 2)	\$480.00		
SUBTOTAL - Task 2 (INCLUDI)	NG MANAGEMENT FE	E)	\$10,080.00
TOTAL FOR ALL TASKS (INC	LUDING MANAGEMEN	IT FEE)	\$20,160.00

# Table 2.11 (f-10)

#### DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439 Modock Road Springs

# Survey - Om P Popli (MBE)

Item	Unit Cost	No. of Items	Total Cost
Task 2			
Survey of 22 wells	\$3,688.00 Lump Sum	1 Lump Sum	\$3,688.00
SUTOTAL - Task 2			\$3,688.00
MANAGEMENT FEE (TAS	K 2)		\$184.00
SUBTOTAL - Task 2 (INCL	UDING MANAGEMENT FEE)		\$3,872.00
TOTAL FOR ALL TASKS (INCLUDING MANAGEMENT FEE)		\$3,872.00	

# Table 2.11 (f-11)

#### DETAILED BREAKDOWN OF UNIT PRICE SUBCONTRACTORS

D-004439 Modock Road Springs

# Larsen Engineers- Field Crew (MBE)

Item	Unit Cost	No. of Items	Total Cost
Task 2			
Field Assistance	\$485.33 day	15 days	\$7,280.00
Overtime	\$60.67 hour	0 hours	\$0.00
Hammer Drill	\$300.00 week	3 weeks	\$900.00
SUTOTAL - Task 2			\$8,180.00
MANAGEMENT FEE (TAS	\$409.00		
SUBTOTAL - Task 2 (INCL	UDING MANAGEMENT FEI	Ξ)	\$8,589.00
Task 3			
Field Assistance	\$827.50 day	0 days	\$0.00
SUTOTAL - Task 3			\$0.00
MANAGEMENT FEE (TAS	K 3)		\$0.00
SUBTOTAL - Task 3 (INCL	UDING MANAGEMENT FEE	E)	\$0.00
TOTAL FOR ALL TASKS (	INCLUDING MANAGEMEN	T FEE)	\$8,589.00

ENGINEER: MALCOLM PIRNIE, INC

#### SCHEDULE 2.11(g)

DATE PREPARED:

11-Oct-07

NYSDEC CONTRACT/WA #:

D-004439-9A Modock Road Springs

MONTHLY COST CONTROL REPORT

MPI STATEMENT #:

BILLING PERIOD: 00/00/00 - 00/00/00

NYSDEC TASK #/NAME:

0266361 SUMMARY SUMMARY OF FISCAL INFORMATION

DEC VOUCHER #:

% of BUDGET COMPLETE: 0%

PROJECT NAME:

MPI PROJECT #:

EXPENDITURE CATEGORY	A COSTS CLAIMED THIS PERIOD (CAP #n-month)	B PAID TO DATE (thru CAP #n-month)	C TOTAL COSTS INCURRED TO DATE (A + B)	D ESTIMATED COSTS TO COMPLETION (F-C)	E ESTIMATED TOTAL CONTRACT PRICE (A+B+D)	F APPROVED BUDGET (Date)	G ESTIMATED UNDER/OVER (F-F)
1. DIRECT SALARY COST						\$78,010	
la. INDIRECT COST - 1.753 %						<b>\$</b> 136,752	
2. SUBTOTAL: Billabe Labor Cost (1+1a)	·	-				\$214,762	
2a. OVER-TIME SALARY						\$0	
3. SUBTOTAL: Direct Salary, Indirect  Cost and Over-time Cost (2+2a)						\$214,761	
4. TRAVEL & SUBSISTENCE						\$15,464	
5. OTHER NON-SALARY COST			·			\$9,595	
6. SUBTOTAL: Direct Non-Salary Cost (4+5)						\$25,059	
7. SUBCONTRACTORS			·			\$259,277	
Management Fee included above						\$12,199	
8. TOTAL CONTRACT COST (3+6+7)	•					\$499,098	
9. FIXED FEE - 10.0 %						\$21,476	
10. TOTAL CONTRACT PRICE (8+9)	·			<u> </u>		\$520,574	
11. RETAINAGE - 0%			,			\$0	
12. CAP FORM SUBMISSION					<u> </u>	\$520,574	

	•	
PROJECT MANAGER ENGINEER		DATE

ENGINEER: MALCOLM PIRNIE, INC

#### SCHEDULE 2.11(g)

DATE PREPARED:

11-Oct-07

NYSDEC CONTRACT/WA#:

D-004439-9A

Modock Road Springs

MONTHLY COST CONTROL REPORT SUMMARY OF FISCAL INFORMATION

BILLING PERIOD: 00/00/00 - 00/00/00 MPI STATEMENT #:

NYSDEC TASK #/NAME: 1 - Work Plan Preparation

0266361

DEC VOUCHER #:

PROJECT NAME:

MPI PROJECT #:

% of BUDGET COMPLETE:	0%						
EXPENDITURE CATEGORY	A COSTS CLAIMED THIS PERIOD (CAP #n-month)	B PAID TO DATE (thru CAP #n-month)	C TOTAL COSTS INCURRED TO DATE (A + B)	D ESTIMATED COSTS TO COMPLETION (F-C)	E ESTIMATED TOTAL CONTRACT PRICE (A+B+D)	F APPROVED BUDGET (Date)	G ESTIMATED UNDER/OVER (F-E)
1. DIRECT SALARY COST						\$23,053	
1a. INDIRECT COST - 1.753 %						\$40,412	
2. SUBTOTAL: Billabe Labor Cost (1+1a)						<b>\$</b> 63,465	
2a. OVER-TIME SALARY						\$0	
3. SUBTOTAL: Direct Salary, Indirect Cost and Over-time Cost (2+2a)						\$63,465	
4. TRAVEL & SUBSISTENCE						\$7,208	
5. OTHER NON-SALARY COST	·					\$2,837	
6. SUBTOTAL: Direct Non-Salary Cost (4+5)						\$10,044	
7. SUBCONTRACTORS  Management Fee included above						\$127,271 \$6,060	
8. TOTAL CONTRACT COST (3+6+7)						\$200,780	
9. FIXED FEE - 10.0 %						\$6,347	
10. TOTAL CONTRACT PRICE (8+9)						\$207,127	

PROJECT MANAGER ENGINEER	 DATE	
I HOUDEL HER HISELINE	 	

PROJECT NAME:

MPI PROJECT #:

ENGINEER: MALCOLM PIRNIE, INC

#### SCHEDULE 2.11(g)

DATE PREPARED:

11-Oct-07

NYSDEC CONTRACT/WA#:

D-004439-9A

Modock Road Springs 0266361

MONTHLY COST CONTROL REPORT SUMMARY OF FISCAL INFORMATION

BILLING PERIOD: 00/00/00 - 00/00/00 MPI STATEMENT #:

DEC VOUCHER #:

NYSDEC TASK #/NAME:

2 - Site Investigation

% of BUDGET COMPLETE:	0%						
EXPENDITURE CATEGORY	A COSTS CLAIMED THIS PERIOD (CAP #n-month)	B PAID TO DATE (thru CAP #n-month)	C TOTAL COSTS INCURRED TO DATE (A+B)	D ESTIMATED COSTS TO COMPLETION (F-C)	E ESTIMATED TOTAL CONTRACT PRICE (A+B+D)	F APPROVED BUDGET (Date)	G ESTIMATED UNDER/OVER (F-E)
1. DIRECT SALARY COST					·	\$41,263	
la. INDIRECT COST - 1.753 %				·		\$72,335	
2. SUBTOTAL: Billabe Labor Cost (1+1a)						\$113,598	
2a. OVER-TIME SALARY		·				\$0	
3. SUBTOTAL: Direct Salary, Indirect						\$113,598	
Cost and Over-time Cost (2+2a)					·		
4. TRAVEL & SUBSISTENCE						\$7,208	·
5. OTHER NON-SALARY COST						\$6,659	
6. SUBTOTAL: Direct						\$13,866	<u>,                                    </u>
Non-Salary Cost (4+5)			•				*
7. SUBCONTRACTORS			,			\$132,006	
Management Fee included above						\$6,139	
8. TOTAL CONTRACT COST (3+6+7)						\$259,470	
9. FIXED FEE - 10.0 %						\$11,360	
10. TOTAL CONTRACT PRICE (8+9)						\$270,830	

PROJECT MANAGER ENGINEER	<u> </u>	·	DATE

PROJECT NAME:

MPI PROJECT #:

ENGINEER: MALCOLM PIRNIE, INC

#### SCHEDULE 2.11(g)

DATE PREPARED:

11-Oct-07

NYSDEC CONTRACT/WA #:

D-004439-9A

Modock Road Springs

MONTHLY COST CONTROL REPORT SUMMARY OF FISCAL INFORMATION

BILLING PERIOD: 00/00/00 - 00/00/00 MPI STATEMENT #:

NYSDEC TASK #/NAME:

0266361 3 - Feasibility Study

DEC VOUCHER #:

% of BUDGET COMPLETE:	0%						
EXPENDITURE CATEGORY	A COSTS CLAIMED THIS PERIOD (CAP #n-month)	B PAID TO DATE (thru CAP #u-month)	C TOTAL COSTS INCURRED TO DATE (A + B)	D ESTIMATED COSTS TO COMPLETION (F-C)	E ESTIMATED TOTAL CONTRACT PRICE (A+B+D)	F APPROVED BUDGET (Date)	G ESTIMATED UNDER/OVER (F-E)
1. DIRECT SALARY COST	·					\$13,693	
Ia. INDIRECT COST - 1.753 %						\$24,005	
2. SUBTOTAL: Billabe Labor Cost (1+1a)						\$37,698	
2a. OVER-TIME SALARY						\$0	·
3. SUBTOTAL: Direct Salary, Indirect						\$37,698	
Cost and Over-time Cost (2+2a)			•				-
4. TRAVEL & SUBSISTENCE						\$1,049	
5. OTHER NON-SALARY COST			· · · · · · · · · · · · · · · · · · ·			\$100	
6. SUBTOTAL: Direct						\$1,149	
Non-Salary Cost (4+5)							
7. SUBCONTRACTORS						\$0	
Management Fee included above						\$0	
8. TOTAL CONTRACT COST (3+6+7)						\$38,847	
9. FIXED FEE - 10.0 %						\$3,770	
10. TOTAL CONTRACT PRICE (8+9)						\$42,617	-

	•	·	
PROJECT MANAGER ENGINEER	<u> </u>	 	DATE

ENGINEER:

MALCOLM PIRNIE, INC

SCHEDULE 2.11 (g) - Supplemental

DATE PREPARED:

11-Oct-07

**NYSDEC CONTRACT#:** 

D-004439

SUBCONTRACTOR COST CONTROL REPORT

BILLING PERIOD: mm/dd/yy - mm/dd/yy

NYSDEC WA #: MPI PROJECT #: WA-9A

SUMMARY OF FISCAL INFORMATION

MPI STATEMENT #:

PROJECT NAME:

0266361 Modock Road Springs

**Unit Price Subcontractors** 

DEC VOUCHER #:

	Α	В	С	D	E	F	G	Н	1 .
	SUI	CONTRACTOR	COSTS		MAN	AGEMENT	FEE		
SUBCONTRACT NAME	CURRENT COSTS, INCLUDES RESUBMITTALS	PAID TO DATE	TOTAL COSTS TO DATE (A + B)	APPROVED BUDGET	MNGT. FEE BUDGET	FEE THIS PERIOD	PENDING FEES	FEE PAID TO DATE	TOTAL COSTS TO DATE (C+F+H)
Laboratory - Chemtech (MBE)     Air Analytical	·			\$12,530.00	\$627.00				(0-1-1)
2. Laboratory - STL Soil and GW Analytical			·	\$14,875.00	\$744.00				
Data Validation - Data Validation Services (WBE)     Data Validation				\$5,885.00	\$294.00				
Springs Geoprobe - Aztech Technologies (WBE)     Geoprobe Drilling				\$6,206.00	\$310.00		-		
<ol> <li>Soil Gas Analysis - Beacon Environmental Services Inc.</li> <li>Soil Gas Analysis</li> </ol>				\$28,054.00	\$1,403.00				
6. Sonic Drilling - Stearns Drilling Sonic Drilling				\$119,010.00	\$5,950.50				
MIP Drilling - Zebra Environmental     MIP Drilling				\$26,350.00	\$1,317.50				
8. IDW - EWMI IDW Disposal				\$3,100.00	\$0.00				
DLS Property Geoprobe - Geologic NY (WBE)     Geoprobe Drilling				\$19,200.00	\$960.00				
10. Survey - Om P Popli (MBE) Survey				\$3,688.00	\$184.00				
11 Larsen Engineers- Field Crew (MBE) Field Work Assistance			•	\$8,180.00	\$409.00				
TOTAL				\$247,078.00	\$12,199.00				

PROJECT MANAGER ENGINEER

ATE	:		

NOTES: (1) Costs listed in Columns A, B, C & D do not include any management fee costs.

<sup>(2)</sup> Management fee is applicable to only properly procured, satisfactorily completed, unit price subcontracts over \$10,000.

<sup>(3) &#</sup>x27;TOTAL' line, Column I should equal Line 7 (subcontracts), Column C of Summary of Fiscal Information Cost Control Report.

ENGINEER: MALCOLM PIRNIE, INC

SCHEDULE 2.11 (g) - Supplemental

DATE PREPARED:

11-Oct-07

NYSDEC CONTRACT #:

D-004439

SUBCONTRACTOR COST CONTROL REPORT

BILLING PERIOD: mm/dd/yy - mm/dd/yy

NYSDEC WA #: MPI PROJECT #: WA-9A

SUMMARY OF FISCAL INFORMATION

MPI STATEMENT #:

PROJECT NAME:

0266361 Modock Road Springs

**CPFF and Unit Price Subcontractors** 

DEC VOUCHER #:

· .	A	В	C	D	E	F	G	Н	I
· .	SUBC	ONTRACTOR	COSTS		MAN				
SUBCONTRACT NAME	CURRENT COSTS, INCLUDES RESUBMITTALS	PAID TO DATE	TOTAL COSTS TO DATE (A + B)	APPROVED BUDGET	MNGT. FEE BUDGET	FEE THIS PERIOD	PENDING FEES	FEE PAID TO DATE	TOTAL COSTS TO DATE (C+F+H)
Cost-Plus-Fixed-Fee: Subcontactors									
1. 0 0				\$0.00	\$0.00				
Subtotal - CPFF Subs:				\$0.00	\$0.00			_	
Unit Price Subcontactors		[							
Laboratory - Chemtech (MBE)     Air Analytical	. •		'	\$12,530.00	\$627.00				
Laboratory - STL     Soil and GW Analytical				\$14,875.00	\$744.00				
Data Validation - Data Validation Services (WBE)     Data Validation	,			\$5,885.00	\$294.00				
Springs Geoprobe - Aztech Technologies (WBE)     Geoprobe Drilling				\$6,206.00	\$310.00				
<ol> <li>Soil Gas Analysis - Beacon Environmental Services Inc.</li> <li>Soil Gas Analysis</li> </ol>				\$28,054.00	\$1,403.00				
Sonic Drilling - Steams Drilling     Sonic Drilling				\$119,010.00	\$5,950.50				
7. MIP Drilling - Zebra Environmental MIP Drilling				\$26,350.00	\$1,317.50				
8. IDW - EWMI IDW Disposal				\$3,100.00	\$0.00			`.	. =
DLS Property Geoprobe - Geologic NY (WBE)     Geoprobe Drilling				\$19,200.00	\$960.00				
10. Survey - Om P Popli (MBE) Survey	,			\$3,688.00	\$184.00				
Larsen Engineers- Field Crew (MBE)     Field Work Assistance				\$8,180.00	\$409.00				
Subtotal - Unit Price Subs:				\$247,078.00	\$12,199.00				
TOTAL		1		\$247,078.00	\$12,199.00				

(1) Costs listed in Columns	A. B. C & D do not inc	lude any management fee costs.

PROJECT MANAGER ENGINEER

<sup>(2) &#</sup>x27;TOTAL' line, Column I should equal Line 7 (subcontracts), Column C of Summary of Fiscal Information Cost Control Report.

# SCHEDULE 2.11 (h) Modock Road Springs (#D-004439-9A) MONTHLY COST CONTROL REPORT - SUMMARY OF LABOR HOURS

Expended to Date/Estimated to Completion
[WORKSHEET - To be submitted, but separately]

Page 1 of 1

Billing Period:

Task#	NSPE Labor Classification Task Name		9 Exp/Est	8 Exp/Est	7	6 Exp/Est	5 Exp/Est	4 FundSat	3 Even/Fort	2	1	Tech	Total No. Direct Labor
Task 1	Work Plan Preparation	Ехр		0	Exp/Est	exp/est 0	exp/est 0	exp/Est	exp/est 0	Exp/Est 0	Exp/Est	Exp/Est 0	Hours Exp/Est
	Work Flair Feparation	Est		51	66	2	0	8	240				0
		2007	5				-			275	- 2	130	779
		2007		51 0	66 0	0	0	8	240	275 0	0	130	779
Teel 2	Size I				.0			<del></del>					0
Task 2	Site Investigation	Exp		0		0	0	0	0	0	0	0	0
		Est		91	114	0	8	0	465	391	20	370	1,461
		2007		.75	90	0	4	0	315	271	20	300	1,076
		2008	1	16	24	0	4	0	150	120	0	70	385
Task 3	Feasibility Study	Exp	0	0	0	0	0	0	0	0	0	0	0
		Est	8	49	65	0	0	0	145	58	20	0	345
		2007	0	0	0	0	0	0	0	0	0	0	0
		2008	8	49	65	0	0	0	145	58	20	0	345
Task 4	Unassigned	Exp	0	0	0	0	0	0	0	0	0	0	0
		Est	0	0	0	0	0	0	0	0	0	0	0
		2007	0	0	0	0	. 0	. 0	0	0	0	0	0
	•	2008	0	0	0	0	0	0	0	0	0	0	0
	. Subtotal	2007 hours	6	126	156	2	· 4	8	555	546	22	430	1,855
	Subtotal	2008 hours	9	65	89	0	4	0	295	178	20	70	730
	Subtotal	Exp hours	0.	0	0	0	0	0	0	0	0	0	0
Total Ho	ours Exp		0	. 0	0	0	0	0	0	0	0	0	0
Total Ho	ours Est		15	191	245	2	8	8	850	724	42	500	2,585

S11466

PROJECT NAME: Modock Road Springs/DLS Sand & Gravel, Site #835013

WA #: D004439-9

TO: Dale A. Desnoyers

The attached Work Plan is submitted for your approval. It has been checked and approved by:

	Name	Initials	Date
Project Manager (scope, level-of-effort, subcontracting).	Jason Pelton	AP .	10/9/07
Contract Manager (conformance with contract and protocols).	Lisa Lewis	LMC	10/5/07
Cost Reviewer (cost reasonableness).	Lisa Lewis	IML 11 des Romando	10/5/07
M/WBE Unit	Brenda L. Moulhem	All Last Dilloca	
Chief, Contracts & Payments Section	Michael J. Cruden	M	10/20/17
T. Wolosen, Fiscal Management Section	Tim Wolosen	Im w	10/24/07
Bureau Director	Donna M. Weigel To Ma	W.C.	10/26/0
Assistant Division Director	Sal Ervolina	SUF	10/5/Ce)

PLEASE CALL THERESA SPAIN AT 2-9764 AFTER SIGN-OFF

OCT 9 20/31

.

From:

Jason Pelton

To:

Lewis, Lisa

Date:

10/22/2007 1:21:06 PM

Subject:

Mödock Road Springs RIFS Budget Justification 📝

Lisa:

Below is the justification for the budget increase associated with the Modock Road Springs RIFS work assignment for D004439-9 for the amount of \$132,549.

#### Thanks

#### Task 1

The Modock Road Springs RIFS Task 1 budget was greater than the proposed Work Assignment budget because, during the scoping meeting, it was decided that Sonic drilling, which costs more than conventional drilling, would be required at this site. In addition, several anticipated out of scope items were included in the proposed budget, including monitoring well inspections, groundwater sampling, and water level measurements.

#### Task 2

The unit cost rate used in the Work Assignment to calculate the labor costs for Task 2 assumed the majority of the Task 2 labor would be conducted by field staff Grade 2 or lower. Based on the previous requirements for this project and after reviewing the Task 2 scope, Malcolm Pirnie determined that there was a need for more management level effort to complete Task 2, specifically in support of public meeting and availability sessions. This resulted in a slight increase in total hours but an average unit rate cost increase from \$64.85/hour to \$77.75/hour.

#### Task 3

The proposed Task 3 budget was greater than the work assignment budget because of the complexity of the project, including supporting NYSDEC on interactions with multiple agencies and the public. Malcolm Pirnie also anticipated there will be a need for out of scope meetings with NYSDEC in preparation for public meetings and availability sessions given the nature of public involvement with this project.

Jason Pelton
Project Manager
Remedial Bureau D
Division of Environmental Remediation
NYSDEC

Ph: 402-9815 or 1-888-459-8667

Fax: 402-9819

From:

Swapan Gupta

To:

Lisa Lewis

Date:

4/26/2007 11:18:19 AM

Subject:

Fwd: Re: Modock Road Springs/DLS Sand and Gravel Site No. 835013

CA from Sal. I would like to assign this to MPI ID for the following reasons: PM preference because of familiarity with site and also the need to assign more work to MPI. Other e-mails will follow. I also have an extra hard copy of the WA which I will leave for you so that you can avoid reprinting the entire document.

>>> Michael Cruden 04/26/07 10:40 AM >>> fyi

>>> Sal Ervolina 04/26/07 10:36 AM >>> I approve the conceptual approval memo for a RI/FS at the Modock Road Springs/DLS Sand and Gravel Site.

>>> Cecelia Artino 4/23/2007 3:46 PM >>> Sal,

Attached is the conceptual approval memo for the above referenced site. The estimated work plan development cost is \$144,875 and the estimated total work assignment is \$388,025.

# **New York State Department of Environmental Conservation**

**Division of Environmental Remediation** 

Remedial Bureau D, 12th Floor

625 Broadway, Albany, New York 12233-7013 **Phone:** (518) 402-9818 • **FAX:** (518) 402-9819

Website: www.dec.state.ny.us



Shall Behor

#### MEMORANDUM

TO:

Salvatore Ervolina, Assistant Division Director, DER

FROM:

Edward R. Belmore, Director, Remedial Bureau D

DATE:

April 23, 2007

SUBJECT:

Conceptual Approval Memo for Modock Road Springs/DLS Sand and Gravel Site

(HW 8-35-013) Remedial Investigation and Feasibility Study Work Assignment

#### Project No., Name and Location:

Modock Road Springs/DLS Sand and Gravel Site (HW 8-35-013) located in the Town of Victor, Ontario County, New York

#### Program Element:

Remedial Investigation and Feasibility Study

#### **Project Duration:**

70 Weeks

#### **Consultant Preference:**

Based on familiarity with the Modock Road Springs Site associated with the implementation of the Immediate Investigation Work Assignment, staff would prefer to continue work at the Modock Road Springs site with Malcolm Pirnie, Inc.

#### Estimated WA Budget (WPDC & Total):

Work Plan Development Cost: \$144,875 Total Work Assignment: \$388,025

#### **Funding Source:**

State Superfund

#### **Brief Project Description:**

The project will involve implementation of a Remedial Investigation/Feasibility Study (RI/FS) at the Modock Road Springs/DLS Sand and Gravel Site. The RI/FS will expand on a preliminary site assessment (PSA) completed at the site in 1995, subsequent investigation activities as part of a Groundwater Investigation completed at the DLS Sand and Gravel, Inc. Property in 2002, and Immediate Investigation Work Assignment (IIWA) activities completed in early 2007. Data collected during previous investigations document the presence of chlorinated volatile organic compounds (CVOCs) including Trichloroethene (TCE), 1,1,1-Trichloroethane (1,1,1-TCA), and Dichloroethene (DCE) in groundwater beneath a residential area in the Town of Victor.

The groundwater contamination was initially discovered in February 1990 during a New York State Department of Health (NYSDOH) initiative to sample small community water supplies across New York State. During this community water supply sampling, the Village of Victor public water supply at the Modock Road Springs was found to contain total VOC concentrations of greater than 200 parts per billion (ppb). Both TCE and 1,1,1-TCA were detected in the spring water at concentrations above the NYSDOH Part 5 drinking water standards of 5 ppb. As a result, the use of the springs as a public water supply ceased and the Village of Victor was connected to the Monroe County Water Authority as a source of supply.

Vapor intrusion sampling completed as part of the IIWA is currently being evaluated, but vapors have been identified in sub-slab samples and one location required installation of a sub-slab depressurization system. Expanded vapor intrusion sampling is being completed and evaluated as part of the IIWA through April 28, 2007. A public meeting to discuss vapor intrusion sampling, domestic water supply sampling, and the overall RI/FS scope will be held in June of 2007.

The primary focus of this WA is to evaluate existing on-site and off-site conditions, evaluate groundwater flow direction, evaluate the nature and extent of the contamination, evaluate possible human exposure to the contaminants, and develop a remedial approach to address on-site and off-site contamination. Due to recent media coverage, specific requests for immediate field activities, the potential for vapor intrusion, and known impacts to groundwater at concentrations exceeding the drinking water standards, field activities have been included as part of Task 1 of this Work Assignment. To allow for follow-up field activities and to expand on information gathered as part of Task 1, similar tasks have been included as Task 2 of this Work Assignment.

ec: D. Weigel

T. Wolosen

S. Gupta

L. Rizzo

D. Finlayson

A.J. White/J. Pelton

B. Putzig

# **Cost Review for Work Plan or Amendment**

Contractor Name: Malcolm Pirnie Date: 10/4/07

WA # and Name: D004439-9, Modock Springs Road/DLS Sand & Gravel Reviewer: Lisa Lewis

	GENERAL COST REVIEW CHECKLIST	Yes	No	Comments
	A complete set of 2.11 Schedules (a) through (h) is attached.	X		
	For multi-site work assignments, Schedule 2.11s are broken down by site.			N/A
1.	Schedule 2.11(a)			
	Rates for indirect and fixed fee match contract rates.	X		
	All numbers rolled up into Schedule 2.11(a) add up.	X		
2.	Schedule 2.11(b) - Direct Labor			
	Average reimbursement rates are used for each year. For future years, an escalation factor of 3% has been used.	X	·	
	Hours are segregated by year.	X		
	Total cost for each NSPE level is shown.	X		
	Total direct labor costs match amounts on Schedule 2.11(a).	X		
	Total labor hours match hours on Schedule 2.11(h).	X		
	The Principal's (NSPE level 9) labor hours charged to WA are less than 2% of the total time.	X		
3.	Schedule 2.11(b-1) - Direct Administrative Labor Hours			
	Breakdown of Schedule 2.11(b-1) is reasonable, i.e., within acceptable guideline of <4% of overall WA LOE. Justification is attached for any exceedance.	X		6% = Okay
4.	Schedules 2.11(c) and (d) - Direct Non-Salary Costs			
	Rates listed in Schedule 2.11(c) are consistent with contract.	X		·
	Rates for in-house and/or miscellaneous costs match contract Schedule 2.10(b).	X		
·	Quotes are included for any non-contract item ( <u>including</u> equipment purchases & rentals; <u>excluding</u> air fare) >\$1k.			N/A
	All costs are allowable, e.g., office telephone and office shipping cannot be reimbursed as a direct cost if they're included in ICR. If they're not in ICR, they are included in 2.10(b) or 2.10(c). Field costs must be receipted.	Х		
	Appropriate lodging/per diem/mileage rates are used.	Х		
	Rates are approved for consultant-owned equipment as per Schedule 2.10(c).	Х		
	Total of direct non-salary costs matches the amount on Schedule 2.11(a).	Х		
	Other direct costs (no. of field days, lodging, and field equipment usage) are reasonable based on field work schedule or supporting documentation.	X		

S S S S S S S S S S S S S S S S S S S	Proposed subconsultant is on standby or has DEC-approved rates with another standby consultant.  Standby subcontract is active and rates (salary, direct and indirect costs, and fixed fee) match contract rates.  A breakdown of direct non-salary costs in the form of additional Schedule 2.11s is attached, if appropriate.  Fotal subcontract cost matches amount on Schedule 2.11(a).  Subcontractor has justified/obtained adequate quotes for any further subcontracted work.  Subcontractor certification(s) have been submitted.  Schedule 2.11(f) - Unit Price Subcontracts  There are quotes for non-standby subcontracts >\$1k. Bids are comparable (quantities and tems) and provide unit costs plus job total.  Standby Drillers (Two phase process) - Costs from at least 3 standbys (or additional quotes from non-standby drillers) are attached. Proper unit costs and			N/A
n n n n n n n n n n n n n n n n n n n	A breakdown of direct non-salary costs in the form of additional Schedule 2.11s is attached, if appropriate.  Total subcontract cost matches amount on Schedule 2.11(a).  Subcontractor has justified/obtained adequate quotes for any further subcontracted work.  Subcontractor certification(s) have been submitted.  Schedule 2.11(f) - Unit Price Subcontracts  There are quotes for non-standby subcontracts >\$1k. Bids are comparable (quantities and tems) and provide unit costs plus job total.  Standby Drillers (Two phase process) - Costs from at least 3 standbys (or additional quotes from non-standby drillers) are attached. Proper unit costs and			
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0	quotes from non-standby drillers) are attached. Proper unit costs and			
	mobilization/demobilization costs are used.	x		Justification given for fewer quotes
	Standby Labs and Data Validators (Used on a rotational basis) - Unit cost per sample match unit cost in their standby contract.	X	·	·
	M/WBE - cost reasonableness of sole source M/WBE contracts <\$10K and are documented.	X		
a	Correct management fee is calculated only on non-professional unit priced subs >\$10k and M/WBE firms from \$1. (Management fee is not allowed on professional engineering firms, architects, or surveyors, unless the contract specifically allows it.)	X		
5	Subcontractor certification(s) have been submitted.	X		
t	Justification is attached for any subcontracts >\$100,000 supporting a determination not to design and competitively bid the work through DEC's Remedial Bureau E. Response-type activities (drum removals, soil excavation, and other construction-type activities) typically must be competitively bid.			N/A
	Schedule 2.11(g) - Cost Control Report			
	Individual 2.11(g)s equal Summary 2.11(g) and costs match those on 2.11(a).	X		
	PMWP or amendment development costs are within 5% of the total WA or amendment costs. Acceptable justification has been submitted if the percentage exceeds 5%.	X		Justification provided.
	PMWP or amendment development costs are limited to preparing a PMWP or amendment. Additional sub-tasks, if included, have been conceptually approved.	X		Approval given.
	Schedule 2.11(g) Supplemental Cost Control Report (subs)			
	Schedules include all applicable subcontracts and management fees (for unit price only).	Х		
	Additional Cost Information/Comments			