REQUEST AUTHORIZATION FOR MAYOR AND FINANCE OFFICER TO SIGN PROFESSIONAL SERVICES AGREEMENT OR AMENDMENT

Date: January 9, 2006

Project Name & Nur	nber: 200	06 Environme	ental Monitoring	& Soils Testing - Lar	ndfill and MRF	CIP#:
Project Description:			5-year contract (Monitoring & So	•	Sampling, Analysis	, & Reporting related to
Consultant: Amer	rican Engine	ering Testin	g, Inc.			
Original Contract Amount:	\$72,086.2		Original Contract Date:	January, 2006	Original Completion Da	te: December, 2006
Amendment Numbe	r:					
Amendment Descrip	otion:					
	ontract Am ange Reque			Current Cor	npletion Date:	
New C	ontract Am	ount:	\$0.	00 New Con	npletion Date:	
Funding Source Thi	s Request:	· · · · · · · · · · · · · · · · · · ·				
Amount	Dept.	Line Item		Co	mments	
\$56,000.00	7102	4223	Landfill Enviror	mental Testing		
\$16,086.20	7103	4223	Waste Water,	MSW Testing		
\$72,086.20	Total		<u> </u>		<u> </u>	
Project Manager - Jerome T. M			Agreement Rev	riew & Approvals Division Manager - Jeron	ne T. Wright	Date > [9]
Department Director - Dirk Ja	blonski		Date	City Attorney		Date
	OUTING INSTRU				FINANCE OFFICE USE OF	
Route two originals of the A Finance Office - Ret Project Manager - R cc: Public Works Engineering Project Mana	tain one original Retain second orig ;		onsultant	· · · · · · · · · · · · · · · · · · ·		te space in the Agreement document) tials Approved Y N

PROPOSAL FOR SAMPLING, ANALYSIS, AND REPORTING RELATED TO 2006 ENVIRONMENTAL MONITORING RAPID CITY LANDFILL RAPID CITY, SOUTH DAKOTA

January 3, 2006

AUTHORIZATION

FOR THE CLIENT:

Client: City of Rapid City, Rapid City Landfill
Authorized Signature:
Typed Name:
Title:
Date:
ACCEPTANCE
FOR AMERICAN ENGINEERING TESTING, INC:
Authorized Signature: Byon J. Sahn
Typed Name: _Byron L. Schulz
Title: Project Manager
Date: Jonnay 3, 2006

BLS

PURPOSE AND SCOPE OF WORK TO BE PERFORMED

The purpose of our work on the project will be to assist the City of Rapid City in Compliance with the Administrative Rules of South Dakota and Environmental Protection Agency regulations specified in 40 CFR Parts 257 and 258, "Solid Waste Disposal Facility Criteria," October 9, 1991, and 40 CFR Part 503, "Standards for the Use or Disposal of Sewage Sludge".

In order to accomplish the above purpose we propose to provide professional services to the City of Rapid City in the form of labor, equipment, supplies, insurance, and other necessary work components necessary to perform the following tasks for Rapid City's Solid Waste Operations Division:

- 1. Field sampling surface water discharges, wastewater discharges and groundwater monitoring wells;
- 2. Installation and sampling/laboratory analysis of replacement and additional groundwater monitoring wells;
- 3. Additional sampling, analysis and reporting for the chloride investigation. We anticipate closure of the chloride investigation within the scope of this proposal.
- 4. Additional sampling, analysis and reporting for carbon disulfide.
- 5. Laboratory analysis of surface water samples, waste water samples, leachate samples, ground water samples, petroleum contaminated soil samples, yard waste compost samples and municipal solid waste/biosolids co-compost samples;
- 6. Evaluation of the groundwater statistical baseline data and completion of the annual groundwater monitoring report;
- 7. Field screening of permanent and existing temporary methane monitoring wells; and
- 8. Environmental evaluation of test results for municipal solid waste/biosolids cocompost sampling for compliance with 40 CFR Part 503.

Anticipated Work Items

Surface Water:

- 1. Providing qualified personnel for surface water discharge sampling with a minimum of one-hour notice. This is estimated to occur eight times per year during high precipitation months.
- 2. Picking up prepared sample bottles, trip blanks, etc. from state-certified lab and returning all to lab upon completion of sampling with a properly completed chain-of-custody.
- 3. Grab samples to be collected weekly during discharge from Outfall 001. Analytes include: TSS, pH, BOD₅, cd, cu, pb, hg, zn, as, crIII, crVI, se, ag, hardness, phenol, toluene, ammonia, DO, and temperature.

- 4. Measuring field pH and temperature at time of sampling. Temperature will be measured with a thermistor, a mercury-filled, or dial type thermometer. Readings will be recorded to the nearest whole degree Celsius. The date and time will be recorded on field logs and chain-of-custody.
- pH will be taken within 15 minutes of sample collection with a pH meter. The pH meter will be read to .01 SU, be equipped with a temperature compensation adjustment, and be capable of simultaneous calibration to two points on the pH scale bracketing the expected pH.
- 6. If a visual sheen is observed during sampling, a grab sample for TPH will be taken. If no sheen is present, a TPH sample is not required. For the purposes of this proposal we have budgeted for the TPH analysis.
- 7. Metals analysis will be performed on a "Total Recoverable" basis and hardness will be measured in the laboratory.
- 8. Analytical results will be reported to the Rapid City Landfill, 300 6th Street, Rapid City, SD 57701.
- 9. Copies of the field logs, including visual observations and field measurements, will be forwarded to the Rapid City Landfill, 300 6th Street, Rapid City, SD 57701 within 72 hours of the sampling event.

Wastewater:

- 1. Providing qualified personnel for required wastewater testing with a minimum of two hours notice of a discharge. This is estimated to occur 15 times per year. Occurrence may increase with greater precipitation or future operational changes.
- 2. Picking up prepared sample bottles, trip blanks, etc. from state-certified lab and returning all to lab upon completion of sampling with a properly completed chain-of-custody.
- Grab samples to be collected once per batch discharge from aerated leachate pond. Analytes include: total as, cd, cr, crVI, cu, pb, hg, ni, se, ag, zn, O&G, BOD, TSS, field pH, and temperature. Batch discharges are usually complete within 12 hours of start.
- 4. Field pH will be taken within 10 minutes after sample collection.
- 5. Analytical results will be reported in mg/l, except for pH in standard units. Analysis will include the date of analysis, the analyst's initials, and a list of analysis method numbers used, as approved by 40 CFR 136.
- 6. Notifying Landfill personnel immediately if field pH readings are 5.0 SU or less. Analysis results will be reported to the Rapid City Landfill, 300 6th Street, Rapid City, SD 57701 in the units listed under number 5 of this section.
- 7. Copies of the field logs, including visual observations and field measurements, will be forwarded to the Rapid City Landfill, 300 6th Street, Rapid City, SD 57701 within 72 hours of the sampling event.

Petroleum Contaminated Soils:

- 1. Analyze soil samples for total petroleum hydrocarbons. Samples may contain gasoline, diesel, JP4 or JP8. There are estimated to be 24 samples per year for analysis.
- 2. Forward results to the Rapid City Landfill, 300 6th Street Rapid City, SD 57701.
- 3. Fax results upon request by the landfill.

Groundwater:

- 1. Providing qualified personnel for semi-annual groundwater monitoring.
- Picking up prepared sample bottles, trip blanks, etc. from a state-certified lab and returning all to lab upon completion of sampling with a properly completed chain-ofcustody.
- 3. Utilizing all appropriate QA/QC practices for field sampling of groundwater.
- 4. Measuring groundwater elevations prior to purging wells. Groundwater elevations will be measured semi-annually, during April and October, on the 17 wells which have been previously measured.
- 5. Collecting samples from each well with a disposable bailer.
- 6. Sampling wells **1-8-19 dab2** (if insufficient water, sample dab1), **1-8-19da2**, **1-8-19dd**, **1-8-19ddd2** (if insufficient water, sample ddd1), **1-8-19dc**, **1-8-19cdd2** (both cdd1 and cdd2 are historically dry), and **1-8-19cab1** semi-annually, during April and October, and analyzing for 40 CFR Part 258, Appendix I volatile organic compounds (VOCs) and the alternative list to metals (biological oxygen demand (BOD), chemical oxygen demand (COD), total organic carbon (TOC), chloride, ammonia, sulfate, sulfide, dissolved iron and manganese, methane, nitrate, and major cations (total calcium, sodium, potassium).
- 7. Sampling wells **1-9-19ad2**, **1-8-19ad1**, and **1-8-19da1** and analyzing semi-annually, during April and October, for the alternative list to metals and annually, during October, for 40 CFR Appendix I VOCs.
- 8. Sampling well **1-8-19ca2** annually, during October, for 40 CFR Part 258 Appendix I VOCs and the alternative list to metals.
- 9. Field measurements for temperature, pH, conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) will be performed at each well during sampling.
- 10. Sampling well 1-8-l9ca2 annually during October for 40CFR Part 258, Appendix I VOCs (no metals) and annually, during October, for indicator parameters.
- 11. Completing an annual report summarizing and evaluating the groundwater monitoring data for the year 2005. This report will be completed and submitted to the City of Rapid City Landfill no later than March 1, 2006. This report will discuss the applicable items in 40 CFR Part 258.53, Sections a through i. It will contain all field logs. Upon review and approval by the Landfill, two final copies will be submitted to the Rapid City Landfill (300 6th Street, Rapid City, SD 57701) and one

copy will be submitted to the South Dakota Department of Environment and Natural Resources, Waste Management Program.

- 12. Arranging and facilitating an annual meeting, during the first two weeks of November in 2006, with City of Rapid City Landfill representatives, appropriate AET staff and subcontractors. This meeting will evaluate the previous year's overall performance, evaluate tasks, propose new tasks, as necessary and summarize revisions to the contract for 2007.
- Electronic files related to the groundwater monitoring statistical analysis and annual report shall be maintained and provided to the City of Rapid City upon request.

Yard Waste Compost Samples:

- 1. Analyze yard waste compost samples for carbon to nitrogen ratio. There are estimated to be 60 samples per year for analysis. Sample collection and transport to laboratory will be done by landfill personnel.
- 2. Analyze yard waste compost samples, four 3/8 inch and four 3/4 inch per year for pH, total soluble salts (conductivity), nutrient content (total N, P₂0₅, K₂O, Ca, Mg), moisture content, organic matter content, maturity (respiration rate) and stability (germination rate). Fecal coliform and trace metals (As, Cd, Cr, Cu, Pb, Hg, Mo, Ni, Se and Zn) must be analyzed for once every six months on each product.
- 3. Fax preliminary results to the Rapid City Landfill within 15 days of sample receipt (fax 394-6843).
- 4. Forward final results to the Rapid City Landfill, 300 6th Street, Rapid City, SD 57701.

Municipal Solid Waste/Biosolids Co-compost Samples:

- 1. Analyze one co-compost samples for fecal coliform (MPN/g of total dry solids), carbon-to-nitrogen ratio (CN) and trace metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Se and Zn). Sample collection and transport to laboratory will be done by MRF or wastewater personnel. Purpose of samples is to follow process from the Dano discharge conveyor, to mid-bay, to end of primary. All samples are to be composited.
- 2. Analyze one co-compost sample for dioxin on or about September first. Sample must be collected from the secondary building prior to refining.
- 3. Analyze one sample for fecal coliform after refining, 14 days before release to public.
- 4. Analyze one composite sample for specific oxygen uptake rate (SOUR mg of oxygen per hour per gram of total solids (dry weight basis).
- 5. Analyze one co-compost sample after refining for compost council standards (pH, soluble salts (conductivity), total N, P₂O₅, K₂O, Ca, Mg, moisture content, maturity, stability, carbon-to-nitrogen ratio (ammonia, total Kjehldahl) and trace metals ((As, Cd, Cr, Cu, Pb, Hg, Ni, Se and Zn).

Proposal for Sampling, Analysis and Reporting Related to 2006 Environmental Monitoring Rapid City Landfill, Rapid City, South Dakota January 3, 2006

- 6. Analyze one co-compost after refining for salmonella.
- 7. Consulting, as requested.
- 8. Forward two copies of all final results. One copy to the Rapid City Landfill, Attn: Jerry Wright, 300 6th Street, Rapid City, SD 57701 and the second copy to Rapid City Water Reclamation, Attn: Bob Druckery, 300 6th Street, Rapid City, SD 57701.

Quarterly Methane Monitoring:

- 1. Providing qualified personnel and equipment for field screening for methane from permanent and existing temporary methane monitoring wells.
- 2. Submitting a summary of the results of the above activities within the annual report for the year 2006.

Environmental Evaluation of Municipal Solid Waste/Biosolids Co-compost Sampling:

- 1. Review analytical results from co-compost sampling for compliance with 40 CFR, Part 503, if requested.
- 2. Submitting a letter report summarizing the results of the above review.

Observation and Testing of Soils:

- 1. Providing qualified personnel and equipment to perform permeability, proctor, gradation and atterberg limits testing, as requested.
- 2. Reporting results of above tests within five working days of the test completion date.

Additional Analysis of Leachate in Southeast Area of Landfill:

- 1. Providing qualified personnel for groundwater monitoring.
- 2. Picking up prepared sample bottles, trip blanks, etc. from a state-certified lab and returning all to lab upon completion of sampling with a properly completed chain-of-custody.
- 3. Utilizing all appropriate QA/QC practices for field sampling of groundwater.
- 4. Measuring groundwater elevations prior to purging wells.
- 5. Collecting samples from each well with a disposable bailer.
- 6. Sampling up to four select monitoring wells and analyzing for Leachate parameters (total as, cd, cr, crVI, cu, pb, hg, ni, se, ag, zn, O&G, BOD and TSS) and anions/cations (chloride, bromide, sodium, calcium, potassium and magnesium), as required.
- 7. Field measurements for temperature, pH, conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) will be performed at each well during sampling.
- 8. Consulting and reporting on above activities.

Chloride Investigation:

- 1. Providing qualified personnel for groundwater monitoring.
- 2. Picking up prepared sample bottles, trip blanks, etc. from a state-certified lab and returning all to lab upon completion of sampling with a properly completed chain-of-custody.
- 3. Utilizing all appropriate QA/QC practices for field sampling of groundwater.
- 4. Measuring groundwater elevations prior to purging wells.
- 5. Collecting samples from each well with a disposable bailer.
- 6. Sampling groundwater monitoring well MW 1-8-19dd and leachate temporary wells LTW-3, LTW-7 and LTW-8 in January, February and March, 2006, and analyzing for anions/cations (chloride, bromide, sodium, calcium, potassium and magnesium).
- 7. Field measurements for temperature, pH, conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) will be performed at each well during sampling.
- 8. Submitting a report to the DENR on the results of the above the above activities, with discussion and conclusions, within 30 days of the receipt of the analytical results.
- 9. Meeting with the DENR to discuss above, if requested.

Installation of Replacement Well for MW 1-8-19dd, Topographical Profile Borings and Additional Well South of MW 1-8-19dab1:

- 1. Advancing up to six soil borings to depths of 30 to 40 feet below grade (bg).
- 2. Installing permanent groundwater monitoring wells in two of the above soil borings and abandoning up to four soil borings.
- 3. Submitting well completion and plugging reports to the DENR
- 4. Developing the monitoring wells.
- 5. Obtaining GPS coordinates and GIS mapping of the above soil borings and monitoring wells.
- 6. Providing qualified personnel for groundwater monitoring.
- 7. Picking up prepared sample bottles, trip blanks, etc. from a state-certified lab and returning all to lab upon completion of sampling with a properly completed chain-of-custody.
- 8. Utilizing all appropriate QA/QC practices for field sampling of groundwater.
- 9. Measuring groundwater elevations prior to purging wells.
- 10. Collecting samples from each well with a disposable bailer.
- 11. Sampling the above additional and replacement well in January, February, March and April, 2006, and analyzing for Appendix I VOCs, the alternative list to metals, and anions/cations (chloride, bromide, sodium, calcium, potassium and magnesium).
- 12. Field measurements for temperature, pH, conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) will be performed at each well during sampling.

13. Utilizing the above analytical and fields results to compile background data for statistical analysis in the 2006 annual report.

Sampling for Carbon Disulfide:

- 1. Providing qualified personnel for groundwater monitoring.
- 2. Picking up prepared sample bottles, trip blanks, etc. from a state-certified lab and returning all to lab upon completion of sampling with a properly completed chain-of-custody.
- 3. Utilizing all appropriate QA/QC practices for field sampling of groundwater.
- 4. Measuring groundwater elevations prior to purging wells.
- 5. Collecting samples from each well with a disposable bailer.
- 6. Sampling groundwater monitoring wells MW1-8-19ddd1, MW1-8-19dab1 and MW1-8-19cab1 in January 2006, and analyzing for VOCs using gas-chromatographic methods. The laboratory will be instructed to analyze by mass-spectrographic methods if there are any detections of carbon disulfide in the samples obtained during the January 2006 sampling event or during the semi-annual groundwater sampling events in 2006.
- 7. Field measurements for temperature, pH, conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) will be performed at each well during sampling.
- 8. Submitting a report to the DENR on the results of the above the above activities, with discussion and conclusions, within 30 days of the receipt of the analytical results.

SAMPLING, ANALYSIS AND REPORTING FOR RAPID CITY LANDFILL (2006)

SURFACE WATER (Outfall 001) Surface Water- Outfall 001 (8 events)		h		•			•	
Preparation, Loading/Unloading Pickup Mileage	1 13	hours miles	@ @	\$ \$	5 50 0.68	=	\$ \$	5.50 8.84
Travel Time	1	hours	@	\$	52 50	=	\$	52.50
Site Time	1	hours	@	\$	52.50	=	\$	52.50
Sample Prep. (pickup/return samples to lab)	0.25	hours	@		52.50	=	\$	13.13
Sampling Equipment (gloves, ice)	1	events	@		5 00	=	\$	5.00
Equipment rental (pH/temp)	1 1	events hours	@	\$ \$	25.00 63.00	=	\$	25.00
Reporting			@ @				\$	63.00
Project Management	0.5	hours	w	\$	68.00	==	\$	34.00
Laboratory Services Subcontractor-Energy Labs			<i>~</i>	ф	240.00		•	040.00
As, Cd, Cr, Cu, Pb, Hg, Se, Ag, Zn, Ammonia, Crilli, CrVI, Hardness, BOD, DO, pH, Phenol, TSS, Toluene, TP	1	samples	@	\$	310.00	=	\$	310.00
Chemistry Markup (includes invoice processing fee, interest on fees paid)						=	\$ •	15.50
SUB TOTAL - Surface Water-Outfall 001 Per Event							\$	584.97
TOTAL - Surface Water-Outfall 001 (8 events)							\$	4,679.72
WASTE WATER - Leachate Pond (15 events)								
Preparation, Loading/Unloading	1	hours	@	\$	52.50	=	\$	52.50
Pickup Mileage	13	miles	@	\$	0.68	=	\$	8.84
Travel Time	1	hours	@	\$	52.50	==	\$	52.50
Site Time	1 0.25	hours hours	@	\$ \$	52.50 52.50	=	\$	52.50
Sample Prep. (pickup/return samples to lab) Sampling Equipment (gloves, ice)	1	events	@ @	Ф \$	52.50	=	\$ \$	13.13 5.00
Equipment rental (pH/temp)	1	events	@	\$	25.00	==	\$	25.00
Reporting	1	hours	@	\$	63.00	=	\$	63.00
Project Management	0.5	hours	@	\$	68.00	=	\$	34 00
Laboratory Services Subcontractor-Energy Labs								
As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Zn, CrVI, O & G, BOD, TSS	1	samples	@	\$	187.00	=	\$	187.00
Chemistry Markup (includes invoice processing fee, interest on fees paid)						==	\$	9.35
SUB TOTAL - Waste Water- Per Event							\$	502.82
TOTAL - Waste Water (15 events)							\$	7,542.23
GROUND WATER (April/October events, annual report and meeting)								
Semi-Annual Event (April)			_					
Preparation, Loading/Unloading (two-man crew)	1	hours	@	\$	105.00	=	\$	105.00
Pickup Mileage	13	miles	@	\$	0.68	=	\$	8.84
Travel Time (two man crew)	1	hours	@	\$	105.00	=	\$	105.00
		hours	@	\$	105.00	==	\$	1,050.00
Site Time (two man crew)	10							
Sample Prep. and Shipping	1	each	@	\$	150.00	=	\$	150.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers)	1 10	each samples	@ @	\$ \$	10.00		\$	100.00
Sample Prep. and Shipping	1 10 1	each	@ @	\$ \$ \$	10.00 75.00	=======================================	\$ \$	100.00 75.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers)	1 10	each samples	@ @	\$ \$	10.00	=	\$	100.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs	1 10 1 2	each samples events	@ @	\$ \$ \$	10.00 75.00	=======================================	\$ \$	100.00 75.00 136.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management	1 10 1 2	each samples events hours	0 0 0	\$ \$ \$ \$	10.00 75.00 68.00	=======================================	\$ \$	100.00 75.00 136.00 1,905.05
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs	1 10 1 2	each samples events hours	000000000000000000000000000000000000000	\$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34	= = =	\$ \$ \$	100.00 75.00 136.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services <i>Subcontractor-Test America Labs</i> Appendix I VOCs and Alternative List to Metals ¹	1 10 1 2 7 3 1	each samples events hours	000000000000000000000000000000000000000	\$ \$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34 0.00	= = = =	\$ \$ \$	100.00 75.00 136.00 1,905.05 550.02 0.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals¹ Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs	1 10 1 2 7 3	each samples events hours samples samples	000000000000000000000000000000000000000	\$ \$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34	= = = =	\$ \$ \$ \$	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals Alternative List to Metals Trip Blank, VOCs	1 10 1 2 7 3 1	each samples events hours samples samples samples	000000000000000000000000000000000000000	\$ \$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34 0.00	= = = = =	\$ \$ \$ \$ \$	100.00 75.00 136.00 1,905.05 550.02 0.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals¹ Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs	1 10 1 2 7 3 1	each samples events hours samples samples samples	000000000000000000000000000000000000000	\$ \$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34 0.00		\$ \$ \$ \$ \$ \$ \$	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals¹ Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs Chemistry Markup (includes invoice processing fee, interest on fees paid)	1 10 1 2 7 3 1	each samples events hours samples samples samples	000000000000000000000000000000000000000	\$ \$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34 0.00		\$ \$ \$ \$ \$ \$ \$ \$	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81 127.19
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs Chemistry Markup (includes invoice processing fee, interest on fees paid) SUB TOTAL - Semi Annual Event (April)	1 10 1 2 7 3 1	each samples events hours samples samples samples	000000000000000000000000000000000000000	\$ \$ \$ \$ \$ \$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34 0.00		\$ \$ \$ \$ \$ \$ \$ \$	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81 127.19
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs Chemistry Markup (includes invoice processing fee, interest on fees paid) SUB TOTAL - Semi Annual Event (April) Semi-Annual Event (October)	1 10 1 2 7 3 1	each samples events hours samples samples samples samples	000000000000000000000000000000000000000	\$ \$ \$ \$ \$ \$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34 0.00 88.81		* * * * * * * * * * * * * * * * * * * *	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81 127.19 4,400.91
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals¹ Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs Chemistry Markup (includes invoice processing fee, interest on fees paid) SUB TOTAL - Semi Annual Event (April) Semi-Annual Event (October) Preparation, Loading/Unloading (two-man crew)	1 10 1 2 7 3 1 1	each samples events hours samples samples samples samples	999999	\$ \$ \$ \$ \$ \$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34 0.00 88.81		* * * * * * * * * * * * * * * * * * * *	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81 127.19 4,400.91
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals¹ Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs Chemistry Markup (includes invoice processing fee, interest on fees paid) SUB TOTAL - Semi Annual Event (April) Semi-Annual Event (October) Preparation, Loading/Unloading (two-man crew) Pickup Mileage	1 10 1 2 7 3 1 1 1	each samples events hours samples samples samples samples hours miles	00 00 00 00 00	\$ \$ \$ \$ \$ \$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34 0.00 88.81		* * * * * * * * * * * * * * * * * * * *	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81 127.19 4,400.91 105.00 8.84
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs Chemistry Markup (includes invoice processing fee, interest on fees paid) SUB TOTAL - Semi Annual Event (April) Semi-Annual Event (October) Preparation, Loading/Unloading (two-man crew) Pickup Mileage Travel Time (two man crew)	1 10 1 2 7 3 1 1 1	each samples events hours samples samples samples samples miles hours	000	\$ \$ \$ \$ \$ \$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34 0.00 88.81		***	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81 127.19 4,400.91 105.00 8.84 105.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals¹ Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs Chemistry Markup (includes invoice processing fee, interest on fees paid) SUB TOTAL - Semi Annual Event (April) Semi-Annual Event (October) Preparation, Loading/Unloading (two-man crew) Pickup Mileage Travel Time (two man crew) Site Time (two man crew)	1 10 1 2 7 3 1 1 1	each samples events hours samples samples samples samples hours hours hours	0000 0000	\$ \$ \$ \$ \$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34 0.00 88.81		****	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81 127.19 4,400.91 105.00 8.84 105.00 1,155.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs Chemistry Markup (includes invoice processing fee, interest on fees paid) SUB TOTAL - Semi Annual Event (April) Semi-Annual Event (October) Preparation, Loading/Unloading (two-man crew) Pickup Mileage Travel Time (two man crew) Site Time (two man crew) Sample Prep. and Shipping	1 10 1 2 7 3 1 1 1 13 1 11 11	each samples events hours samples samples samples samples hours hours hours each	000000000000000000000000000000000000000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34 0.00 88.81 105.00 0.68 105.00 105.00 150.00		**** ***** ***	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81 127.19 4,400.91 105.00 8.84 105.00 1,155.00 150.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals¹ Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs Chemistry Markup (includes invoice processing fee, interest on fees paid) SUB TOTAL - Semi Annual Event (April) Semi-Annual Event (October) Preparation, Loading/Unloading (two-man crew) Pickup Mileage Travel Time (two man crew) Site Time (two man crew) Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers)	1 10 1 2 7 3 1 1 1 13 1 11 11	each samples events hours samples samples samples samples hours hours hours each samples	000000000000000000000000000000000000000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	10.00 75.00 68.00 272.15 183.34 0.00 88.81 105.00 0.68 105.00 105.00 150.00 10.00		***	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81 127.19 4,400.91 105.00 8.84 105.00 1,155.00 150.00 110.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs Chemistry Markup (includes invoice processing fee, interest on fees paid) SUB TOTAL - Semi Annual Event (April) Semi-Annual Event (October) Preparation, Loading/Unloading (two-man crew) Pickup Mileage Travel Time (two man crew) Site Time (two man crew) Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe)	1 10 1 2 7 3 1 1 1 13 1 11 1 1 1	each samples events hours samples samples samples samples hours hours hours each samples events	000000000000000000000000000000000000000	\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	10.00 75.00 68.00 272.15 183.34 0.00 88.81 105.00 0.68 105.00 105.00 150.00 75.00		**** ***** ****	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81 127.19 4,400.91 105.00 8.84 105.00 1,155.00 150.00 110.00 75.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals¹ Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs Chemistry Markup (includes invoice processing fee, interest on fees paid) SUB TOTAL - Semi Annual Event (April) Semi-Annual Event (October) Preparation, Loading/Unloading (two-man crew) Pickup Mileage Travel Time (two man crew) Site Time (two man crew) Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management	1 10 1 2 7 3 1 1 1 13 1 11 1 1 1	each samples events hours samples samples samples samples hours hours hours each samples events	000000000000000000000000000000000000000	\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	10.00 75.00 68.00 272.15 183.34 0.00 88.81 105.00 0.68 105.00 105.00 150.00 75.00		**** ***** ****	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81 127.19 4,400.91 105.00 8.84 105.00 1,155.00 150.00 110.00 75.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs Chemistry Markup (includes invoice processing fee, interest on fees paid) SUB TOTAL - Semi Annual Event (April) Semi-Annual Event (October) Preparation, Loading/Unloading (two-man crew) Pickup Mileage Travel Time (two man crew) Site Time (two man crew) Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs	1 10 1 2 7 3 1 1 1 13 1 11 1 1 1 1 1 2	each samples events hours samples samples samples hours miles hours each samples events hours	@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@	\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	10.00 75.00 68.00 272.15 183.34 0.00 88.81 105.00 0.68 105.00 105.00 150.00 150.00 75.00 68.00		****	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81 127.19 4,400.91 105.00 8.84 105.00 1,155.00 150.00 110.00 75.00 136.00
Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals¹ Alternative List to Metals Trip Blank, VOCs Equipment Blank, VOCs Chemistry Markup (includes invoice processing fee, interest on fees paid) SUB TOTAL - Semi Annual Event (April) Semi-Annual Event (October) Preparation, Loading/Unloading (two-man crew) Pickup Mileage Travel Time (two man crew) Site Time (two man crew) Sample Prep. and Shipping Sampling Equipment (gloves, ice, bailers) Equipment rental (pH/temp/conductivity, interface probe) Project Management Laboratory Services Subcontractor-Test America Labs Appendix I VOCs and Alternative List to Metals	1 10 1 2 7 3 1 1 1 1 1 1 1 1 1 1 1 1 2	each samples events hours samples samples samples samples hours hours hours each samples events hours	0 0000000000000000000000000000000000000	\$\$\$\$ \$\$\$\$ \$	10.00 75.00 68.00 272.15 183.34 0.00 88.81 105.00 0.68 105.00 105.00 150.00 150.00 75.00 68.00		****	100.00 75.00 136.00 1,905.05 550.02 0.00 88.81 127.19 4,400.91 105.00 8.84 105.00 1,155.00 150.00 110.00 75.00 136.00

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· Chemistry Markup (includes invoice processing fee, interest on fees paid)						=	\$	154 12
SUB TOTAL - Semi Annual Event (October)							\$	5,081 42
Annual Report and Meeting								
Report Preparation (annual report with statistical analysis)	4	h a	<i>←</i>	Φ.	00.00		Φ.	070.00
Project Manager Staff Professional (annual report)	4 40	hours hours	@		68.00 63.00	=	*	272.00 2,520 00
Statistical Analysis - Lump Sum Subcontractor- LBG	1	each	@ @		2,500 00	=		2,520.00
Draftsperson	3	hours	@		42.00	=		126.00
Clerical	4	hours	@		31.50	=		126.00
Senior Review	2	hours	@		89 00	=		178 00
Meeting with DENR, if requested	12	hours	@		68 00	=	\$	816.00
SUB TOTAL - Annual Report and Meeting							\$	6,538.00
TOTAL - Groundwater - Apr/Oct events, Annual Report and Meeting							\$	16,020.34
PETROLEUM CONTAMINATED SOILS								
Laboratory Services Subcontractor-Energy Labs								
Laboratory analysis (TPH-G,BTEX,MTBE,Naph or TPH-FO,Naph)	1	samples	@	\$	65.00	==	\$	65.00
Chemistry Markup (includes invoice processing fee, interest on fees paid)			Ŭ	·		=	\$	3.25
SUB TOTAL - Petroleum Contaminated Soils -Per Sample							\$	68.25
TOTAL - Petroleum Contaminated Soils (24 samples)							\$	1,638.00
WARD WASTE COMPOST CAMED TO								
YARD WASTE COMPOST SAMPLES								
Laboratory Services Subcontractor-Energy Labs	60	aammilaa	@	ıtı.	25.00		•	0.400.00
C-N Ratio	60 8	samples	@		35.00	==	\$	2,100.00
pH, cond., total N, P₂O₅, K₂O, Ca, Mg, Moisture/Org. matter, resp/germ. rate Fecal coliform and Trace Metals(As,Cd,Cr,Cu, Pb, Hg, Nı, Se, Zn)	4	samples samples	@ @	\$ \$	235.00 132.00	=	\$ \$	1,880.00
Chemistry Markup (includes invoice processing fee, interest on fees paid)	4	samples	w	φ	132.00	==	э \$	528.00 225.40
TOTAL - Yard Waste Compost Samples						_	\$	4,733.40
							Ψ	-1,1001-10
MUNICIPAL SOLID WASTE/BIOSOLIDS CO-COMPOST SAMPLES								
Consulting	_							
Project Manager	8	hours	@	\$	68.00	=	\$	544.00
Laboratory Services Subcontractor-Energy Labs	4	aanantaa	(a)	φ	467.00	_	•	407.00
Fecal coliform, C-N Ratio and Trace Metals(As,Cd,Cr,Cu, Pb, Hg, Ni, Se, Zn) Dioxin	1	samples samples	@ @		167.00 625.00	=	\$	167.00 625.00
Fecal Coliform (after refining)	1	samples	@	\$	25.00	=	\$ \$	25.00
Specific O ₂ Uptake Rate (SOUR)	1	samples	@	\$	50.00	===	Ψ \$	50.00
pH, cond., total N, P ₂ O ₅ , K ₂ O, Ca, Mg, Moisture, Maturity, C-N Ratio, Trace Metal	1	samples	@	\$	347.00	=	\$	347.00
Salmonella	1	samples	@		100.00	=	\$	100.00
Chemistry Markup (includes invoice processing fee, interest on fees paid)				·		**	\$	65.70
TOTAL - Municipal Solid Waste/Biosolids Co-Compost Samples							\$	1,923.70
OUA DTEDLY METHANIC MONITODING (2004 Demonstrate Markets Markets Markets)								·
QUARTERLY METHANE MONITORING (2004 Permanment Methane Wells)								
Four Quarterly Events (Field Screening for Methane) Preparation, Loading/Unloading	4	hours	@	\$	52.50	==	\$	210.00
Pickup Mileage	52	miles	@	\$	0.68	=	Ф \$	35.36
Travel Time	4	hours	@	\$	52.50	==	\$	210.00
Site Time	20	hours	@	\$	52.50	=	\$	1,050.00
Equipment rental (Combustible Gas Indicator)	4	events	@	\$	75.00	=	\$	300.00
Draftsperson	2	hours	@	\$	42 00	=	\$	84.00
Project Management	2	hours	@	\$	68.00	===	\$	136.00
TOTAL - Quarterly Methane Monitoring			_				\$	2,025.36
TAINIDONIMENTAL EVALUATION OF MOW BIOCOLIDS CO COMBOST TEST BESILL TO	EOB	COMPLIAN	CE 14	ити	E02 DECLI	LAT	ION	c
ENVIRONMENTAL EVALUATION OF MSW BIOSOLIDS CO-COMPOST TEST RESULTS Data Review	8 8	hours	@ @		60.00	EA I =		
Reporting	4	hours	@		60.00	=	\$ \$	480.00 240.00
TOTAL - Municipal Solid Waste/Biosolids Co-Compost 503 Compliance Review	7	nours	w	Ψ	00.00	_	\$	720.00
TO TAL - Indinisipal Cond Tracter biosonias de Composit du Compinistra Review							Ψ	720.00
OBSERVATION AND TESTING OF SOILS								
Permeability Tests	3	tests	_	\$	150.00	==	\$	450.00
Proctor Tests	3	tests	_	\$	125.00	=	\$	375.00
Gradation Tests	3	hours	@	\$	60.00	==	\$	180.00
Atterberg Limits	3	tests	@	\$ •	60 00	=	\$ •	180 00
Field Technician	8	hours	@	\$	44 00	=	\$	352.00
data/an8/envi/proposals/RCSLE-2006 wh3								

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Reporting	3	hours	@	\$	36 00	=	\$	108 00
Project Management	2	hours	@	\$	76 50	=		153.00
TOTAL - Observation and Testing of Soils							\$	1,798.00
ADDITIONAL ANALYSIS OF LEACHATE IN SOUTHEAST CORNER OF LANDFILL								
Consulting								
Project Manager	8	hours	@	\$	68 00	=	\$	544.00
Sampling (1 event)								
Preparation, Loading/Unloading (two-man crew)	1	hours	@		105 00	=		105 00
Pickup Mileage	13	miles	@		0 68	=	•	8.84
Travel Time Site Time	1 4	hours hours	@		105.00	=	-	105.00
Sample Prep. (pickup/return samples to lab)	0.5	hours	@ @		105.00 52 50	=		420 00 26,25
Sampling Equipment (gloves, ice, bailers)	4	samples	@		10.00	=	•	40 00
Equipment rental (pH/temp/conductivity, interface probe)	1	events	@		75.00	=	-	75.00
Laboratory Services Subcontractor-Energy Labs			•	•	10.00		Ψ	70.00
As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Zn, CrVI, O & G, BOD, TSS	4	samples	@	\$	187.00	=	\$	748 00
Anions/Cations (chloride, bromide, sodium, calcium, potassium, magnesium)	4	samples	@		58.00	=	\$	232.00
Chemistry Markup (includes invoice processing fee, interest on fees paid)		•	~			=	\$	49 00
OTAL - Additional Analysis of Leachate in Southeast Corner of Landfill							\$	2,353.09
								·
CHLORIDE INVESTIGATION	1							
Sampling Wells 1-8-19dd, LTW-3, LTW-7 and LTW-8 (three events- January, Fe					405.00			
Preparation, Loading/Unloading (two-man crew)	1	hours	@		105.00	=	\$	105 00
Pickup Mileage Travel Trave (two man areas)	13 1	miles	@		0 68		\$	8.84
Travel Time (two man crew) Site Time (two man crew)	4	hours hours	@ @	\$ \$	105.00 105.00	=	\$	105.00
Sample Prep. (pickup/return samples to lab)	0.5	hours	@	\$ \$	52.50	=	\$ \$	420.00 26.25
Sampling Equipment (gloves, ice, bailers)	4	samples	@	Ψ \$	10.00	=	φ \$	40.00
Equipment rental (pH/temp/conductivity, interface probe)	1	events	@	\$	75.00	=	\$	75.00
Project Management	1.5	hours	@	\$	68.00	=	\$	102.00
Laboratory Services Subcontractor-Energy Labs			•	•	00.00		*	.02.00
Anions/Cations (chloride, bromide, sodium, calcium, potassium, magnesium)	4	samples	@	\$	58.00	=	\$	232.00
Chemistry Markup (includes invoice processing fee, interest on fees paid)						=	\$	11.60
SUB TOTAL - Per Event							\$	1,125.69
TOTAL - Sampling Wells 1-8-19dd, LTW-3, LTW-7 and LTW-8 (three events)							\$	3,377.07
Report to DENR - Sampling Wells 1-8-19dd, LTW-3, LTW-7 and LTW-8 (four eve	ents - D	ec. 05, Jan	, Fel)., a	nd Mar. 06)			
Reporting - AET	16	hours	@	\$	68.00	=	\$	1,088.00
Meeting with DENR, if requested	12	hours	@	\$	68 00	=	\$	816.00
Reporting - Time and Materials Subcontractor-LBG	1	each	@	\$	2,000.00	=	\$	2,000.00
Hydrogeologic Consulting & Meetings - Time and Materials Subcontractor-LBG	1	each	@	\$	4,000.00	=	\$	4,000.00
TOTAL - Report to DENR							\$	7,904.00
TOTAL - Chloride Investigation							\$	11,281.07
NSTALL REPLACEMENT WELL FOR MW 1-8-19dd, TOPOGRAPHICAL PROFILE BOF Hollow Stem Auger Drilling Services (2-person crew)	RINGS	AND ADDIT	IONA	AL V	WELL SOUT	но	F M	W 1-8-19dab
Preparation, Loading/Unloading	4	hours	@	\$	102.50	=	\$	410.00
Travel Time (4 round trips)	4	hours	@	\$	102.50	=	\$	410.00
Drill Rig Mileage (1 round trip)	13	miles	@	\$	1.03		\$	13.39
Pickup Mileage (4 round trips)	52	miles	@	\$	0 68	=	\$	35 36
Soil Boring for Well dd (1 to 30 feet bg with continuous sampling)	30	In. feet	@	\$	13.00		\$	390 00
Soil Borings for Topographical Profile (4 to 40 feet bg with continuous sampling)	160	In. feet	@	\$	13.00		\$	2,080.00
Soil Boring for Additional Well (1 to 30 feet bg with continuous sampling)	30	In. feet	@	\$	13.00		\$	390.00
Decontamination	60	In. feet	@	\$	3 00		\$	180.00
Well Materials and Installation	2	each	@	\$	600.00		\$	1,200.00
Soil Boring Abandonment (labor and materials)	4	each	@	\$	100.00		\$	400.00
Equipment Services		al a a	@	\$	75.00	=	\$	300.00
Equipment Services Combustible Gas Indicator Rental	4	days						
Combustible Gas Indicator Rental Water/FP Level Indicator	4 4	days	@		25.00	=	\$	100.00
Combustible Gas Indicator Rental Water/FP Level Indicator Personnel Services		-			25.00	=	\$	100.00
Combustible Gas Indicator Rental Water/FP Level Indicator		-		\$	25.00 68 00		\$	100.00 204.00

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 Reporting (soil boring/MW completion logs and DENR well completion reports) Staff Professional 	4	hours	@	\$	68 00	=		
Preparation, Loading/Unloading	2	hours	@	\$	63 00		\$	94.50
Travel Time (4 round trips)	4	hours	@		63.00	=	\$	
Mileage (4 round trips)	52	miles	@		0.68	=	\$	35 36
On-site Time	28	hours	@		63.00		\$	
Environmental Technician			_					
Preparation, Loading/Unloading	1	hours	@	\$	52.50	=	\$	52.50
Travel Time (1 round trip)	1	hours	@		52.50	=	\$	52.50
Mileage (1 round trip)	13	miles	@	\$	0.68	=	\$	8.84
On-site Time (well development)	4	hours	@	\$	52.50		\$	210.00
Field GPS Services			_					
Staff Professional								
Preparation, Loading/Unloading	1	hours	@		\$63 00	=	\$	63 00
Travel Time (1 round trip)	1.0	hours	@		\$63 00	=	\$	63.00
Mileage (1 round trip and on-site)	16	miles	@		\$0.68	=	\$	10.88
Field Mapping	2	hours	@		\$63.00		\$	94.50
Drafting - GIS Mapping	4	hours	@		\$63.00		\$	252.00
Trimble GPS and Software Rental	1	days	@		\$180 00	=	\$	180.00
TOTAL - Install Replacement Well for MW 1-8-19dd, Topo. Profile Borings & Addition	nal We	•	_	-8-1	9-dab1		\$	9,517.83
Sampling Replacement and Additional Wells (four events- January, February, March								·
Preparation, Loading/Unloading (two-man crew)	1	hours	@	\$	105.00	=	\$	105.00
Pickup Mileage	13	miles	@	\$	0.68	=	\$	8.84
Travel Time (two man crew)	1	hours	@	\$	105.00	Ħ	\$	105.00
Site Time (two man crew)	2	hours	@	\$	105 00	=	\$	210.00
Sample Prep. and Shipping	1	each	@	\$	150.00	=	\$	150.00
Sampling Equipment (gloves, ice, bailers)	2	samples	@	\$	10.00	=	\$	20.00
Equipment rental (pH/temp/conductivity, interface probe)	1	events	@	\$	75.00	=	\$	75.00
Project Management	0.5	hours	@	\$	68.00	=	\$	34.00
Reporting	1	hours	@	\$	68.00	=	\$	68.00
Laboratory Services Subcontractor-Test America Labs	•	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•	*	00.00		*	00.00
Appendix I VOCs and Alternative List to Metals ²	2	samples	@	\$	272.15	==	\$	544.30
Anions/Cations (chloride, bromide, sodium, calcium, potassium, magnesium)	2	samples	@	\$	58.00	=	\$	116.00
Trip Blank, VOCs	1	samples	@	\$	0.00	=	\$	0.00
Equipment Blank, VOCs	1	samples	@	\$	88.81	=	\$	88.81
Chemistry Markup (includes invoice processing fee, interest on fees paid)	•		•	*		=	\$	37.46
SUB TOTAL - Per Event							\$	1,562.41
TOTAL - Sampling Replacement and Additional Wells (four events)							\$	6,249.62
							•	0,2 10.02
SAMPLING FOR CARBON DISULFIDE - MONITORING WELLS MW 1-8-19ddd1, dab1	and cal	b1 (January	2006	3)				
Preparation, Loading/Unloading (two-man crew)	1	hours	@	\$	105.00	=	\$	105.00
Pickup Mileage	13	miles	@	\$	0.68	=	\$	8.84
Travel Time (two man crew)	1	hours	@	\$	105.00	=	\$	105 00
Site Time (two man crew)	3	hours	@	\$	105 00	=	\$	315.00
Sample Prep. and Shipping	1	each	@	\$	150.00	=	\$	150.00
Sampling Equipment (gloves, ice, bailers)	3	samples	@	\$	10.00	==	\$	30.00
Equipment rental (pH/temp/conductivity, interface probe)	1	events	@	\$	75 00	=	\$	75.00
Project Management	0 5	hours	@	\$	68.00	=	\$	34.00
Reporting	6	hours	@	\$	68.00	=	\$	408.00
Laboratory Services Subcontractor-Test America Labs								
Appendix I VOCs	3	samples	@	\$	88 81	=	\$	266.43
Trip Blank, VOCs	1	samples	@	\$	0.00	=	\$	0.00
Equipment Blank, VOCs	1	samples	@	\$	88.81	=	\$	88 81
Chemistry Markup (includes invoice processing fee, interest on fees paid)						=	\$	17.76
TOTAL - Sampling for Carbon Disulfide							\$	1,603.84
TOTAL COST							\$	72,086.20

SECTION 1 - RESPONSIBILITIES

- 1.1 The party to whom the proposal/contract is addressed is considered the Client of American Engineering Testing, Inc. (AET). The terms and conditions stated are binding, upon acceptance, on the Client, its successors, assignees, joint ventures and third-party beneficiaries. Oral proposal acceptance or authorizing purchase orders from the Client are considered formal acceptance of AET's terms and conditions.
- 1.2 Prior to AET performing work, Client will provide AET with all information that may affect the cost, progress, safety and performance of the work. This includes, but is not limited to, information on proposed and existing construction, all pertinent sections of contracts between Client and property owner, site safety plans or other documents which may control or affect AET's work. If new information becomes available during AET's work, Client will provide such information to AET in a timely manner. Failure of client to timely notify AET of changes to the project including, but not limited to, location, elevation, loading, or configuration of the structure or improvement will constitute a release of any liability of AET. Client will provide a representative for timely answers to project-related questions by AET.
- 1.3 Work by AET will not relieve other persons of their responsibility to perform work according to the contract documents or specifications, and AET will not be held responsible for work or omissions by Client and other persons. AET does not perform construction management, general contracting or surveying services and our presence on site does not constitute any assumption of those responsibilities. AET will not be responsible for directing or supervising the work of others, unless specifically authorized and agreed to in writing.
- 1.4 Work by AET often includes sampling at specific locations. Inherent with such sampling is variation of conditions between sampling locations. Client recognizes this uncertainty and the associated risk, and acknowledges that opinions developed by AET, based on the samples, are qualified to that extent.
- 1.5 AET is not responsible for interpretations or modifications of AET's recommendations by other persons.
- 1.6 Should changed conditions be alleged, Client agrees to notify AET before evidence of alleged change is no longer accessible for evaluation.

SECTION 2 - SITE ACCESS AND RESTORATION

- 2.1 Client will furnish AET safe and legal site access.
- 2.2 It is understood by Client that in the normal course of the work, some damage to the site or materials may occur. AET will take reasonable precautions to minimize such damage. Restoration of the site is the responsibility of the Client.

SECTION 3 - SAFETY

- 3.1 Client shall inform AET of any known or suspected hazardous materials or unsafe conditions at the work site. If, during the course of AET's work, such materials or conditions are discovered, AET reserves the right to take measures to protect AET personnel and equipment or to immediately terminate services. Client shall be responsible for payment of such additional protection costs.
- 3.2 AET shall only be responsible for safety of AET employees at the work site. The Client or other persons shall be responsible for the safety of all other persons at the site.

SECTION 4 - SAMPLES

- 4.1 Client is responsible for informing AET of any known or suspected hazardous materials prior to submittal to AET. All samples obtained by, or submitted to, AET remain the property of the Client during and after the work. Any known or suspected hazardous material samples will be returned to the Client at AET's discretion.
- 4.2 Non-hazardous samples will be held for 30 days and then discarded unless, within 30 days' of the report date, the Client provides a written request that AET store or ship the samples, at the Client's expense.

SECTION 5 - PROJECT RECORDS

The original project records prepared by AET will remain the property of AET. AET shall retain these original records for a period of three years following submission of the report, during which period the project records can be made available to Client at AET's office at reasonable times.

SECTION 6 - STANDARD OF CARE

AET will perform services consistent with the level of care and skill normally performed by other firms in the profession at the time of this service and in this geographic area, under similar budgetary constraints. No other warranty is implied or intended.

SECTION 7 - INSURANCE

AET carries Worker's Compensation, Comprehensive General Liability, Automobile Liability and Professional Liability insurance. AET will furnish certificates of insurance to Client upon request.

SECTION 8 - DELAYS

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If AET work delays are caused by Client, work of others, strikes, natural causes, weather, or other items beyond AET's control, a reasonable time extension for performance of work shall be granted, and AET shall receive an equitable fee adjustment.

SECTION 9 - PAYMENT, INTEREST AND BREACH

- 9.1 Invoices are due on receipt. Client will inform AET of invoice questions or disagreements within 15 days of invoice date; unless so informed, invoices are deemed correct.
- 9.2 Chent agrees to poly interest on uniquid invoice balances of write of 18% por month, of the maximum allowed by law, whickever is loss, beginning Maks after intrice Mete.
- 9.3 If any invoice remains unpaid for 60 days, such non-payment shall be a material breach of this agreement. As a result of such material breach, AET may, at its sole option, terminate all duties to the Client or other persons, without liability.
- 9.4 Client will pay all AET collection expenses and attorney fees relating to past due fees which the Client owes under this agreement.

SECTION DY MEDIATION

- 101 Client and ADT agree that any cleam, dispute ox other matter in question artising out of ox related be this Agricument 1/3/06 shall be subject be mediation be considered on arbitration of legal or equivable producings by eilder party.
- 102 Unless Client and ADT mutually aprece otherwise, mediation shall be accordance with the Construction Industry Mediation Rives of the American Arbitration Association. Repress for mediation shall be by whing and the parties Mall shall be accordable by the parties Mall by accordable by the parties and shall be accordable by the parties are also accordable by the parties and shall be accordable by the parties are also accordable by the parties are al experience of compactical construction matters.

SECTION X LITICATION REIMDURSEMENT

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SECTION 12 - MUTUAL INDEMNIFICATION

- 12.1 AET agrees to hold harmless and indemnify Client from and against liability arising out of AET's negligent performance of the work, subject to Section 13 and any other limitations, other indemnifications or other provisions Client and AET have agreed to in writing.
- 12.2 Client agrees to hold harmless and indemnify AET from and against liability arising out of Client's negligent conduct, subject to any limitations, other indemnifications or other provisions Client and AET have agreed to in writing.
- 12.3 If Client has indemnity agreement with other persons, the Client shall include AET as a beneficiary.

SECTION 13 - LIMITATION OF LIABILITY

Client agrees to limit AET's liability to Client arising from negligent acts, errors or omissions, such that the total liability of BLS AET shall not exceed \$10,000 pt shall not exceed the profect feet, whichever jugged acts. The firmits of any 1/3/06 1/3/06

SECTION 14 - TERMINATION

After 7 days written notice, either party may elect to terminate work for justifiable reasons. In this event, the Client shall pay for all work performed, including demobilization and reporting costs to complete the file.

SECTION 15 - SEVERABILITY

Any provisions of this agreement later held to violate a law or regulation shall be deemed void, and all remaining provisions shall continue in force. However, Client and AET will in good faith attempt to replace an invalid or unenforceable provision with one that is valid and enforceable, and which comes as close as possible to expressing the intent of the original provision.

SECTION 16 - GOVERNING LAW

This Agreement shall be construed, and the rights of the parties shall be determined, in accordance with the Laws of the State of Misselle South Dakota, 7th Judicial Circuit, Rapid City, Penn. Co.

SECTION 17 - ENTIRE AGREEMENT

This agreement, including attached appendices, is the entire agreement between AET and Client. This agreement nullifies any previous written or oral agreements, including purchase/work orders. Any modifications to this agreement must be in writing.

AMERICAN ENGINEERING TESTING, INC.

SUBSURFACE BORING SUPPLEMENT TO TERMS AND CONDITIONS

Page 1 of 1

SECTION 1 - UNDERGROUND UTILITY AND STRUCTURE CLEARANCE

- 1.1 It is necessary that borings, excavations and other penetrations be located such that they maintain a minimum safe distance from underground utilities or other man-made objects. Client shall advise AET of all utilities that service or are located on the site, as well as any underground improvements located on the site. AET will contact state notification centers, where available, or individual utility owners where a state notification center is not available prior to drilling.
- 1.2 Public utility owners may not provide the locating service on private property. In such situations, the Client is responsible for location of such utilities prior to drilling.
- 1.3 The property owner may have private underground improvements which cannot be cleared through the state notification center or public utility owners. The Client is responsible for location of these improvements.
- 1.4 AET will not be responsible for any damages to "non-located" or incorrectly located underground utilities or other manmade improvements.

SECTION 2 - SITE RESTORATION

2.1 - Client accepts that in the normal course of field exploration work, certain types of damage to the site may occur which are inherent with this type of work, such as tire indentations to lawns and landscape areas. It is the responsibility of AET to take reasonable precautions to minimize such damage. It is also AET's responsibility to patch boreholes placed through pavement or slab areas after performance of borings. Otherwise, restoration of the site is the responsibility of the client.

SECTION 3 - CONTAMINATION

- 3.1 Client acknowledges and accepts that unavoidable contamination risks may be associated with AET's subsurface drilling, sampling and installation of monitoring devices. Risks include, but are not limited to, cross contamination created by linking contaminated zones to uncontaminated zones during the drilling process; containment and proper disposal of known or suspected hazardous materials, drill cuttings and drill fluids; and decontamination of equipment and disposal and replacement of contaminated consumables. Client and AET agree that the discovery of unanticipated actual or suspected hazardous materials may make it necessary for AET to take immediate measures, including regulatory notification, to protect human health and safety, and/or the environment. Client and AET also agree that the discovery of such materials constitutes a changed condition which may result in added costs to the Client, and may require a renegotiation of work scope or termination of services.
- 3.2 Pursuant to risks set forth in Section 3.1, which are inherent with AET's work performed on the Client's behalf, Client agrees to hold harmless and indemnify AET from and against liability associated with contamination resulting therefrom.

SECTION 4 - LOST EQUIPMENT

Equipment lost in bore holes may be required to be retrieved or properly abandoned by government agencies. Client agrees to pay AET all costs related to retrieving and/or abandoning such equipment at AET fee schedule rates, unless agreed otherwise.

SECTION 5 - LIMITATIONS OF SUBSURFACE EXPLORATION

Client recognizes that unavoidable risks occur whenever engineering or related disciplines are applied to identify subsurface conditions. Variations in soil conditions usually occur between and beyond sampled/tested locations. Even a comprehensive sampling and testing program performed in accordance with a professional standard of care may fail to detect certain conditions, because the variability of conditions cannot be seen. For similar reasons, actual environmental, geologic and geotechnical conditions that AET characterizes to exist between sampling points may differ significantly from those that actually exist The passage of time also must be considered, and Client recognizes that, due to natural occurrences or direct or indirect human activities at the site or distant from it, actual conditions discovered may change. Client recognizes that nothing can be done to eliminate the risks associated with these limitations.

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