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

Project Name & Number: 2018 Environmental Monitoring Contract Landfill/MRF
Project No. 18-2250 **CIP #:**

Project Description: 2018 Environmental monitoring contract for landfill and MRF. Contract includes monitoring of groundwater, wastewater, methane, and similar environmental monitoring required under the City's solid waste permit.

Consultant: American Engineering and Testing, Inc.

Original Contract Amount:	$86,611.57	**Original Contract Date:**	January 1, 2018	**Original Completion Date:**	

Addendum No:

Amendment Description:

Current Contract Amount:		**Current Completion Date:**	
Change Requested:			
New Contract Amount:	$0.00	**New Completion Date:**	

Funding Source This Request:

Amount	Dept.	Line Item	Fund	Comments
86,611.57	7102	4223	615	
	Total			

Agreement Review & Approvals

Karl Merbach — 12-4-17
Project Manager — Date

Division Manager — 12-4-17 — Date

Compliance Specialist — 12-6-17 — Date

Department Director — 12-8-17 — Date

City Attorney — 12-6-17 — Date

ROUTING INSTRUCTIONS

Route two originals of the Agreement for review and signatures.
Finance Office - Retain one original
Project Manager - Retain second original for delivery to Consultant
cc: Public Works
Engineering
Project Manager

FINANCE OFFICE USE ONLY

(Note to Finance: Please write date of Agreement in appropriate space in the Agreement document)

	Date	Initials	Approved	
Appropriation	12/8/17	JD	(Y)	N
Cash Flow			Y	N

AN AGREEMENT BETWEEN THE CITY OF RAPID CITY AND AMERICAN ENGINEERING TESTING, INC. FOR SAMPLING, ANALYSIS, AND REPORTING RELATED TO 2018 ENVIRONMENTAL MONITORING FOR THE RAPID CITY MUNICIPAL LANDFILL

This Agreement is made and entered into this _____ day of _____, 2017, by and between the City of Rapid City, located at 300 Sixth Street, Rapid City, South Dakota 57701, herein after referred to as the "City," and American Engineering Testing, Inc., located at 1745 Samco Road, Rapid City, South Dakota 57702, herein after referred to as the "Consultant."

WHEREAS, the City is in need of a firm for sampling, analysis, and reporting related to 2014 environmental monitoring for the Rapid City municipal landfill; and

WHEREAS, the Consultant has the necessary technical expertise to perform such services on behalf of the City; and

WHEREAS, the City wishes to retain the Consultant to perform the professional services so desired; and

WHEREAS, the purpose of this Agreement is to establish the terms and conditions of the Consultant's scope of services and the compensation it is to be paid for those services.

NOW THEREFORE, the parties hereby agree as follows:

1. The Consultant agrees to perform the work identified in the Scope of Work, which has been attached hereto and incorporated herein as Exhibit A.

2. The City agrees to compensate the consultant in an amount not to exceed $89,884.94 for the work performed under this Agreement. The City shall not compensate the Consultant for any work in excess of this amount unless the Consultant first obtains prior permission from the City.

3. The Terms and Conditions attached to the Scope of Work are modified from their original form to reflect removal of the portions which have been crossed out.

4. The parties' rights and obligations under the Agreement shall be governed by, and construed in accordance with, the laws of the State of South Dakota. Any dispute concerning this Agreement shall be litigated, and venued, in Pennington County, South Dakota, in the Circuit Court of the Seventh Judicial Circuit for the State of South Dakota.

Dated this _____ day of _____, 2017

AMERICAN ENGINEERING TESTING, INC.

_____

Date _____

THE CITY OF RAPID CITY, SOUTH DAKOTA

By_____
Steve Allender, Mayor

Date _____

ATTEST:

By_____
Pauline Sumption, Finance Officer

Date _____

(SEAL)

AMERICAN
ENGINEERING
TESTING, INC.

CONSULTANTS
· GEOTECHNICAL
· MATERIALS
· ENVIRONMENTAL

October 17, 2017

Mr. Karl Merbach
Superintendent of Solid Waste Operations
City of Rapid City
300 Sixth Street
Rapid City, SD 57701

Subject: Annual Contract Renewal Work Plan for Sampling, Analysis, and Reporting
Related to 2018 Environmental Monitoring for the Rapid City Landfill
Rapid City, South Dakota
AET Project No. 18-00352

Dear Mr. Merbach:

American Engineering Testing, Inc. (AET) is pleased to present this work plan for contract renewal to provide professional services to the Rapid City Landfill for the year 2018. The work will be performed as detailed in the attachments.

As requested, we have attached the following documents required to initiate the contract renewal:

- A contract authorization for services in 2018. For your convenience, we have signed and attached two copies of the authorization. Please sign both copies, return one to me and keep the other for your records.
- A purpose and work scope for the 2018 monitoring plan.
- An estimate of the costs to perform the services as required in the work scope.
- A copy of AET's "General Terms and Conditions", as modified to reflect changes negotiated in the original 5-year contract.
- A Certificate of Liability Insurance for 2018 naming the City of Rapid City as additional insured.

We look forward to providing these professional services to the Rapid City Landfill for the year 2018. If you have any questions or require additional information at this time, please contact me at (605) 388-0029 or rprann@amengtest.com.

Respectfully,

Robert A. Prann, EIT, CPRR
Environmental Project Manager

ANNUAL CONTRACT RENEWAL
WORKPLAN FOR SAMPLING, ANALYSIS, AND REPORTING
RELATED TO 2018 ENVIRONMENTAL MONITORING FOR
RAPID CITY LANDFILL
RAPID CITY, SOUTH DAKOTA

October 17, 2017

AUTHORIZATION

FOR THE CLIENT:

Client: City of Rapid City, Rapid City Landfill

Authorized Signature: _____

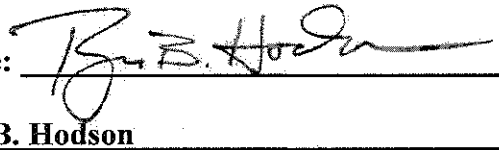
Typed Name: _____

Title: _____

Date: _____

ACCEPTANCE

FOR AMERICAN ENGINEERING TESTING, INC:

Authorized Signature: 

Typed Name: Roger B. Hodson

Title: Senior Environmental Project Manager

Date: October 17, 2017

ANNUAL CONTRACT RENEWAL
WORKPLAN FOR SAMPLING, ANALYSIS, AND REPORTING
RELATED TO 2018 ENVIRONMENTAL MONITORING FOR
RAPID CITY LANDFILL
RAPID CITY, SOUTH DAKOTA

October 17, 2017

AUTHORIZATION

FOR THE CLIENT:

Client: City of Rapid City, Rapid City Landfill

Authorized Signature: _____

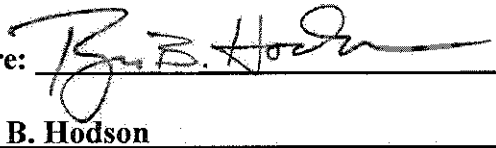
Typed Name: _____

Title: _____

Date: _____

ACCEPTANCE

FOR AMERICAN ENGINEERING TESTING, INC:

Authorized Signature: 

Typed Name: Roger B. Hodson

Title: Senior Environmental Project Manager

Date: October 17, 2017

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.

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 Solid Waste Operations Division:

1. Field sampling surface water discharges, wastewater discharges, and groundwater monitoring wells;
2. Laboratory analysis of surface water samples, wastewater samples, groundwater samples, petroleum contaminated soil samples, and yard waste compost samples;
3. Quarterly screening of permanent and temporary methane monitoring wells, methane surface emissions, and measurement of water levels in select wells;
4. Calculating and evaluating Greenhouse Gas (GHG) emissions; and
5. Completion and submission of the annual groundwater monitoring report.

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 twelve times per year during high precipitation months.
2. Picking up prepared sample bottles, trip blanks, etc. from a state-certified lab and returning all to that lab upon completion of sampling with a properly completed chain-of-custody.
3. Grab samples will be collected weekly during discharge from Outfall 001. Analytes include: TSS, pH, BOD_5, Cd, Cu, Pb, Hg, Zn, As, CrIII, CrVI, Se, Ag, Ni, selenate, selenite, hardness, phenol, toluene, ammonia, DO, and temperature.
4. Sampling for whole effluent toxicity testing if requested or required. *For the purposes of this proposal we have budgeted for two whole effluent toxicity tests per year.*
5. Measuring field pH, DO, and temperature at time of sampling. Temperature will be measured with a thermistor or 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.
6. pH will be taken within 15 minutes of sample collection with a pH meter. The pH meter will be read to 0.01 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.
7. 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 TPH analysis.*
8. Metals analysis will be performed on a "Total Recoverable" basis and hardness will be measured in the laboratory.
9. Analytical results will be reported to Solid Waste Operations. Any concentrations exceeding discharge permit limits will be reported directly to the Solid Waste Operations

Superintendent as soon as known.

10. Copies of the field logs, including visual observations and field measurements, will be forwarded to Solid Waste Operation within 72 hours of the sampling event.
11. A summary of the surface water sampling will be incorporated into the annual report.

Wastewater:

1. Providing qualified personnel for required wastewater testing with a minimum two-hour 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.
3. Grab samples to be collected once per batch discharge from the aerated leachate pond. Analytes include: 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 the Solid Waste Operations Superintendent immediately if field pH readings are 5.0 SU or less.
7. Notifying the Solid Waste Operations Superintendent, as soon as known, if any concentrations exceed discharge permit limits.
8. Copies of the field logs, including visual observations and field measurements, will be forwarded to Solid Waste Operations within 72 hours of the sampling event.
9. Semi-annual composite sampling of the leachate extraction systems (Cells 12 and 16) will be conducted in a manner to meet the Rapid City Landfill's Industrial Wastewater discharge permit Number 401. Samples will be analyzed for As, Cd, Cr, CrVI, Cu, Pb, Hg, Ni, Se, Ag, Zn, O&G, BOD, TSS, field pH, and temperature.
10. Monthly composite sampling of the leachate extraction systems (Cells 12 and 16) will be conducted in a manner to meet the Rapid City Landfill's Industrial Wastewater discharge permit Number 401. Samples will be analyzed for BOD, TSS, field pH, and temperature.
11. A summary of the above waste water sampling will be incorporated into the annual report.
12. Monthly composite samples from the leachate extraction systems may also be analyzed for total mercury (Hg) – these samples will be logged on a separate chain of custody and reported separately from the routine monthly samples. The analytical results will be submitted to the City separately from the annual SD DENR report.

Groundwater:

1. Providing qualified personnel for semi-annual groundwater monitoring. Up to 16 wells will be sampled during the April and October monitoring events.
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. Utilizing all appropriate QA/QC practices for field sampling of groundwater.
4. Measuring and recording groundwater elevations during both semi-annual sampling events for all 23 site monitoring wells.
5. Collecting samples from each well using a peristaltic pump and flow cell. A disposable bailer will be used for wells **1-8-19da4** and **1-8-19da5** because of the well depths.

6. Sampling wells **1-8-19dab2** (if insufficient water sample **1-8-19 dab1**), **1-8-l9dd, 1-8-19 ddd2** (if insufficient water sample **1-8-19 ddd1**), **1-8-l9dc, 1-8-19cdd2** (both cdd1 and cdd2 are historically dry), and **1-8-l9cab1, 1-8-19ad1, 1-8-19ad2R, 1-8-19ca2, 1-8-19da1, 1-8-19da2, 1-8-19da4, 1-8-19da5, and 1-8-19dda** semiannually for 40 CFR Appendix I volatile organic compounds (VOCs) and the alternative list to metals - biochemical oxygen demand (BOD), chemical oxygen demand (COD), total organic carbon (TOC), chloride, ammonia, sulfate, sulfide, dissolved iron and manganese, methane, nitrate, and major cations (calcium, sodium, potassium). Field measurements for temperature, pH, conductivity, dissolved oxygen (DO), and oxidation-reduction potential will be performed at each well during sampling using a low flow purging method via a flow-through cell. All groundwater monitoring will be done in accordance with the approved groundwater monitoring program (GWMP) for the Rapid City Landfill, as approved by the South Dakota Department of Environment and Natural Resources (SD DENR). Samples will be collected using low flow methods or disposable bailer in the case of wells **1-8-19da4** and **1-8-19da5**.
7. Monitoring wells **1-8-19ddR**, and **1-8-19adc** will be sampled and analyzed semiannually for 40 CFR Appendix I VOCs and the alternative list to metals. Samples from these wells may also be analyzed for total mercury (Hg). Field measurements for temperature, pH, conductivity, dissolved oxygen (DO), and oxidation-reduction potential will be performed at each well during sampling using a low flow purging method via a flow-through cell. Samples will be collected using low flow methods. The analytical results from these two wells will be submitted to the City separately from the annual SD DENR report.
8. Forwarding analytical results and field measurements for the semiannual monitoring events to Solid Waste Operations upon completion.
9. Notifying the Solid Waste Operations Superintendent, as soon as known, if any concentrations exceed regulatory limits.
10. Compiling and completing a statistical analysis of the new data and entering the data into the annual groundwater report. The statistical analysis procedure will comply with 40 CFR Part 258.53, Sections e through i.
11. Completing an annual report summarizing the groundwater monitoring data for each year with appropriate statistical comparison to prior data. An initial report will be completed and submitted to Solid Waste Operations no later than February 15th of the following year and two final copies (one to Solid Waste Operations and one to SD DENR) by April 1st of the following year. This report will discuss the applicable items in 40 CFR Part 258.53, Sections a through i.
12. Maintaining electronic files related to the groundwater monitoring, statistical analysis and annual report and will be provided to Solid Waste Operations upon request.

Groundwater (VOC Sampling):

1. Providing qualified personnel for quarterly groundwater monitoring. Up to 3 wells will be sampled during the monitoring events.
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. Utilizing all appropriate QA/QC practices for field sampling of groundwater.
4. Collecting headspace air samples to be analyzed for EPA Air Method Toxic Organics (TO-15 VOCs).
5. Measuring and recording groundwater elevations during quarterly sampling events for all 3 site monitoring wells.

6. Collecting samples from each well using a peristaltic pump and flow cell.
7. Sampling wells **1-8-19da1, 1-8-19da3, 1-8-19da4,** quarterly for EPA Air Method Toxic Organics (TO-15 VOCs). Field measurements for temperature, pH, conductivity, dissolved oxygen (DO), and oxidation-reduction potential will be performed at each well during sampling using a low flow purging method via a flow-through cell. Samples will be collected using low flow methods.
8. Forwarding analytical results and field measurements for the quarterly monitoring events to Solid Waste Operations upon completion.
9. Notifying the Solid Waste Operations Superintendent, as soon as known, if any concentrations exceed regulatory limits.
10. Compiling the new data and entering the data into the annual groundwater report.
11. Maintaining electronic files related to the groundwater monitoring, statistical analysis and annual report and will be provided to Solid Waste Operations upon request.

Quarterly Methane Monitoring and Groundwater Level Measurements:

1. Providing qualified personnel and equipment for field screening for methane from permanent and temporary methane monitoring wells.
2. Conducting surface emissions monitoring in the methane extraction well field in accordance with ARSD 74:36:07:40 and 40 CFR 60.755(c) and 60.756(f).
3. Measuring groundwater elevations in monitoring wells **1-8-19da3**, **1-8-19da4**, **1-8-19adc**, **1-8-19dab1**, **1-8-19dab2**, **1-8-19da1**, **1-8-19da2**, **1-8-19da5**, **1-8-19ddR**, **1-8-19dd**, and **1-8-19ad1**.
4. Submitting a summary of the results of the above activities within the annual report.
5. Advising the Solid Waste Operations Superintendent of any significant issues related to methane.

Greenhouse Gas Emissions Calculations:

1. Utilizing historical scale data to calculate GHG emissions for each year to determine if the Rapid City Municipal Landfill is likely to exceed the EPA's 25,000 metric ton emissions limit which would require reporting GHG emissions to the EPA in March of the following year. GHG emissions evaluation will be performed in accordance with 40 CFR 98, Subparts A and HH.
2. Providing GHG emissions information to the City of Rapid City for their records. If the GHG emissions are calculated to exceed the mandatory reporting limit, providing the information to the City of Rapid City in a format suitable for submittal to the SD DENR or EPA.
3. Assisting the City of Rapid City with any GHG reporting required by the EPA or SD DENR under 40 CFR Part 98 Subpart A, Section 98.1-98.8 and Subpart HH, Section 98.340-98.348.