

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

Date: February 12, 2008

Project Name & Number: Landfill Leachate Removal and Remediation - Investigative Phase **CIP #:** 50694
Project No. LF07-1681

Project Description: Provide field investigation services, conceptual design services, and interaction with State agencies to define and mitigate potential leachate migration at the Rapid City Regional Landfill. This is the first phase of a potentially three phase project.

Consultant: Wenck Associates, Inc.

Original Contract Amount: \$ 90,006.00 **Original Contract Date:** February 19, 2008 **Original Completion Date:** July 18, 2008

Amendment Number:

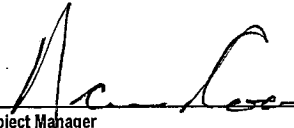

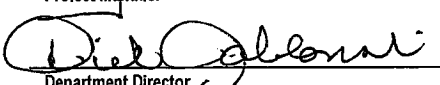
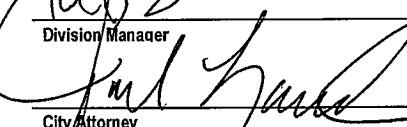
Amendment Description:

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

Funding Source This Request:

Amount	Dept.	Line Item	Comments
\$90,006.00	7102	4223	Solid Waste Disposal Fund
\$90,006.00	Total		

Agreement Review & Approvals

 _____ Project Manager	2/4/08 _____ Date	 _____ Division Manager	2-4-08 _____ Date
 _____ Department Director	2/4/08 _____ Date	 _____ City Attorney	2/4/08 _____ 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
2/4/08	JB	(Y) N
		Y N



CONSULTING AGREEMENT

By and Between

CITY OF RAPID CITY
300 Sixth Street
Rapid City, South Dakota 57701

and

WENCK ASSOCIATES, INC.
1800 Pioneer Creek Center
P.O. Box 249
Maple Plain, Minnesota 55359-0249

(701) 297-9600
Fax: (701) 297-9601
E-mail: wenckfa@wenck.com

This Agreement entered into this 19th day of February, 2008 by and between **City of Rapid City** (hereinafter the **Client**) and **WENCK ASSOCIATES, INC.** (hereinafter the **Consultant**) to provide certain professional engineering services as set forth below.

I. Work to be Performed

The **Consultant** shall furnish professional engineering services as directed by the **Client**. The **Consultant** will provide experienced staff to perform the services in a competent and professional manner. The services will include the work described in Exhibit I. At the **Client's** request the **Consultant** shall furnish periodic cost estimates to the **Client** for services to be performed.

II. Compensation

In full consideration for services under this Agreement, the **Consultant** shall be compensated for services on a per task basis, not to exceed the amount stated in Exhibit I.

Additional work approved by the **Client**, outside of the scope of services described in Exhibit I, will be billed at hourly rates as shown in Exhibit II. No work outside of Exhibit I, will be done unless approved by the **Client**.

The **Consultant** shall bill **Client** on a monthly basis and shall provide any reports, invoices and records which may reasonably be required. All invoices shall be submitted to the **Client's** representative for payment. **Client** shall make payment on the basis of properly itemized and documented invoices within 30 days after receipt of the invoice.

III. Independent Contractor

In rendering services hereunder, the **Consultant** shall be an Independent Contractor and no employer/employee relationship shall arise out of or result from rendering such services.

IV. Personnel

The **Consultant** represents that it has, or will secure at its own expense, all personnel required in performing the Services under this Agreement. It is agreed that other consultants and contractors that may be required to fully carry out the work will be retained directly by the **Client**.

All of the Services required hereunder will be performed by The **Consultant** and all personnel engaged in the work shall be fully qualified and shall be authorized and permitted under South Dakota and local laws to perform such Services.

V. Responsibilities

The **Consultant** shall be and remain liable in accordance with applicable law for damages to the **Client** caused by The **Consultant's** negligent performance of Services furnished under this Agreement except for errors, omissions, or other deficiencies to the extent attributable to **Client**, or any third party. The **Consultant** shall not be responsible for any time delays in the project caused by circumstances beyond the **Consultant's** control.

VI. Changes

The **Client** may, at any time by written order, make changes within the general scope of this Agreement in the Services to be performed. If such changes cause an increase or decrease in cost of, or time required for, performance of any Services under this Agreement, whether or not changed by any order, an equitable adjustment shall be made and this Agreement shall be modified in writing accordingly. Any claim of the **Consultant** for adjustment under this

clause must be asserted in writing within thirty (30) days from the date of receipt by the **Consultant** of the notification of change unless the **Client** grants a further period of time before the date of final payment under this Agreement.

VII. Assignability

The **Consultant** shall not assign any interest in this Agreement, and shall not transfer any interest in the same (whether by assignment or novation), without prior written consent of the **Client** hereto.

VIII. Confidentiality

Any reports, information, data, drawings, specifications, estimates and summaries given to or prepared or assembled by the **Consultant** under this Agreement shall not be made available to any individual or organization by the **Consultant** to the extent allowed by law without prior written consent of the **Client** hereto. All reports and other communications from the **Consultant** concerning the work to be performed shall be directed to the **Client**.

IX. Insurance

The **Consultant** specifically obligates themselves to the **Client** in the following respects, to wit:

The **Consultant** shall defend, indemnify and hold harmless the **Client**, their officers, agents and employees, from suits, actions, proceedings, claims or liability including, but not limited to, death or personal injury of persons, property damage, and expenses including reasonable attorney's fees, costs and other fees, incidental to the defense of such suits, actions, proceedings or claims, based upon or alleged to be based upon, the error, omission, or negligent act by the **Consultant**, its officers, agents or employees and arising out of, occurring in connection with, resulting from, or caused by the performance, or failure of performance, or the work or Services under this Agreement.

Client will indemnify, defend and hold the **Consultant** harmless from any and all loss, damages, costs, penalties, claims, liabilities, and expenses including reasonable investigation and legal expenses arising out of any claim or loss or damage of any nature whatsoever from

or in any way related to **Consultant** services to **Client** under this Agreement based upon or alleged to be based upon the error, omission, or negligent act of **Client**, its officers, agents or employees, excepting any acts or omissions arising out of the negligent performance of any services provided by the **Consultant**, its officers, agents, or employees.

The **Consultant** further specifically agrees that it is an independent Contractor and an employing unit subject as an employer, to applicable Unemployment Compensation Statutes, so as to relieve the **Client** of responsibility of liability for treating the **Consultant's** employees as employees of the **Client** for the purpose of keeping records, making reports and payment of Unemployment Compensation taxes or contributions; and the **Consultant** agrees to indemnify and hold the **Client** harmless and reimburse them for expense or liability incurred under said Statutes in connection with employees of the **Consultant**, including a sum equal to benefits paid to those who were the **Consultant's** employees, where such benefit payments are charged to the **Client** under any Merit Plan or its individual Reserve Account pursuant to any State Unemployment Compensation Statute.

The **Consultant** shall also provide and maintain in full force and effect during the time of this Agreement, insurance covering the operation of automobiles, trucks and other vehicles of the company satisfactory to the **Client**, protecting the **Consultant** and the **Client** against liability from damages because of injuries, including death, suffered by a person or persons other than employees of the **Consultant**, and liability or damages to property, arising from or growing out of the **Consultant's** operations in connection with the performance of this Agreement.

Automobile Liability Insurance shall be in the sum of not less than \$1,000,000 for Combined Single Limit for Bodily Injury and Property Damage. General Liability Insurance shall be in the sum of not less than \$1,000,000 Combined Single Limit for Bodily Injury and Property damage.

Such Insurance policies shall have the City of Rapid City as an additional insured with respect to all activities arising out of the performance of the services under this agreement.

A signed Certificate of Insurance satisfactory to the **Client** of compliance with the requirements of this section shall be furnished to the **Client** under this Agreement. Such Certificate of Insurance shall provide for ten (10) days written notice to the **Client** prior to the cancellation or modification of any insurance referred to therein. The **Client** failure to obtain from the **Consultant** a Certificate of Insurance conforming to the foregoing requirements shall not be deemed a waiver of any of the foregoing requirements.

X. Representatives

Mr. Howard Trussell will be the representative for the **Consultant** for the purpose of this Agreement. **Mr. Dan Coon** will be the **Client's** representative for the purposes of this Agreement.

XI. Termination

This Agreement shall be effective from February 19, 2008 and shall terminate upon completion of the **Consultant** work hereunder unless sooner terminated by either party by giving sixty days notice of termination in writing to the other party.

IN WITNESS WHEREOF, the **Client** and **Consultant** have executed this Agreement as of February 19, 2008.

Approved as to form and execution this 19th day of February, 2008.

CITY OF RAPID CITY

WENCK ASSOCIATES, INC.

Mayor

Howard M. Trussell
Principal

City Finance Officer

[Signature]
Executive Vice President

APPROVED AS TO FORM
CITY ATTORNEY'S OFFICE

2-4-08
Date

Date

[Signature]
Attorney

Exhibit I

Engineering Services for Leachate Removal and Remediation

City of Rapid City, South Dakota

Project Scope

The landfill's environmental monitoring system (EMS) historically has had elevated chloride concentrations in the wells on its eastern boundary (i.e., 1-8-19dd (dd), 1-8-19 ad2 (ad2), and 1-8-19da1 (da1)). As elevated chlorides are often associated with leachate and potential leachate migration, the South Dakota Department of Environment and Natural Resources (DENR) became concerned and requested the City of Rapid City – Solid Waste Division to evaluate the potential for impacts from its landfill leachate. This was done and results reported to DENR in the "Chloride Investigation – Rapid City Sanitary Landfill", AET, Inc., June 22, 2006. Included in this report was the recommendation that, "...steps be taken to begin the removal of the leachate present in the area of the LTW-series wells..." (i.e., the northeast corner of landfill Cell 12). This recommendation is the basis for the present Request for Proposal, "to provide investigative and design services to define and mitigate potential leachate migration at the Rapid City Landfill."

To respond to the City's RFP, a senior Wenck environmental engineer visited the site to review the information and discuss the situation with key City personnel. Wenck staff also preformed a preliminary review of the "Chloride Investigation" report and the latest Annual Monitoring Report (2006). From this evaluation it became evident that time and effort from both the Solid Waste Division and their consultants went into the existing leachate evaluations, and that valuable hydrogeologic information was gained. Some key points were:

- Boundary wells ad2, da1, and dd are not impacted by landfill leachate.
- Leachate impacts are shown in well 1-8-19da3, and to a lesser degree in 1-8-19ddR and 1-8-19da4. These wells are generally close to the edge of waste, i.e., da3 actually penetrated waste, and the other two lie within 200 to 300 feet of the probable edge of waste.
- Wells ddR and da4, thought to be potentially impacted by leachate, were analyzed in 2006 for Appendix II parameters (VOCs, SVOCs, Pesticide/PCBs, etc.) and a single detection of isobutanol (10.1 mg/l) was found (in da4); all other organics were non-detect.
- Regular landfill monitoring during 2006 had three (3) low-level VOC detections in any of the EMS wells; two (2) in da4 and one in ddR.
- Site is underlain by shale, the upper portions of which are weathered to what several drilling logs state as, "Fat Clay." The competent shale is also described as "Fat Clay, black, dry to moist."
- The area in question has fill derived from the 1972 flood, and as such, has presumably been in place over 30 years. It is primarily comprised of demolition debris materials. It is unlined, as it predates such regulations.

- The City does not use groundwater near the landfill for water supply, but some of the nearby businesses do use relatively shallow wells for their own supply.

Project Approach

Based on our preliminary evaluation of the leachate situation and discussions with Solid Waste Division staff, the City wants to preserve a valuable resource, the landfill, for the future, and thus proactively take care of any potential environmental problem before it becomes a significant issue. Therefore, the first major task will be to define the actual extent of leachate contamination, and evaluate the extent of risk it poses, now and in the future.

The City's RFP has a detailed plan they would like to have used to progress through the necessary process steps, and this will be used throughout. However, our proposed leachate investigation will be as follows (but will be amended as needed based on early discussions with the City, and based on a thorough background data review to start the process off):

Task 1: Investigation Workplan and Coordination with the City

- Attend a kick-off meeting with the City to set out City desires/goals for the project, expectations for the process, and to discuss project strategy.
 - Perform a thorough background data review, including fill history of Cell 12.
 - Collect two (2) leachate characterization samples from two (2) LTW-series wells. Analyze (with expedited turnaround) for VOCs, metals, and geochemicals to allow determination of elevated leachate parameters (i.e., indicators) that can be used to evaluate potential leachate migration outside of the fill.
- Prepare an Investigation Workplan laying out the proposed field investigation and analyses that will be used for the leachate evaluation.
 - Present draft workplan to the City for their review and concurrence.
 - Submit "final" workplan to DENR.
- Meet with the DENR together with the City to present the proposed investigation and discuss State expectations. Wenck's experience has shown that by involving the regulatory agency in the planning process, they will take "ownership" of the process much better, and be much easier to work with throughout the rest of the process, as well as more likely to agree to the final recommendation made by the City (from the report).

Task 2: Field Investigation

- On-site Wenck hydrogeologist overseeing entire process
- Subcontract - Interstate Drillers of Thompson, ND (well-experienced in Rapid City area and licensed in SD).
- Will install at least 10 one-inch diameter temporary monitoring wells using 2-inch O.D. MacroCore Sampler techniques.
 - These temporary monitoring wells are fast to construct, easy to use for obtaining high quality groundwater samples, can be used for determination of both water levels and water quality, and relatively inexpensive, as 8 to 10 can be installed in a single day.

Geoprobe techniques frequently fail to take adequate samples in low permeability clay sites such as yours. There is also the potential that this technique may not penetrate into the shale. MacroCore temporary wells work well in these environments, and have been used extensively by Wenck. They are quickly installed, used for 1 to 2 days for sampling, and then abandoned, leaving no permanent monitoring wells as observations over the area.

- Survey top of casings of the temporary wells to allow comprehensive water table mapping, together with the existing wells.
- Develop temporary wells and sample for parameters shown to be elevated in the Cell 12 leachate, and thus likely to show potential leachate migration. Use expedited turnarounds from lab, if needed.
- Define detailed site stratigraphy and evaluate potential groundwater (leachate) pathways.
 - Look especially for buried drainage thought to flow northward off-site towards Lake Herman.

Task 3: Leachate Migration Assessment Report

- Determine leachate migration extent from water quality results, stratigraphy, water table mapping, flow calculations using derived site hydraulic conductivities and gradients, site history (fill), etc. Prepare a written report of the findings.
 - Use statistical analysis techniques to supplement the differentiation of impacted areas from unimpacted areas.

Task 4: Risk Assessment

- Evaluate risk posed by leachate migration to the area, and prepare a written report of the findings.
 - Nearby water supply wells (from Permit Application – wells within 5 miles of site).
 - Mainly qualitative risk analysis techniques, but quantitative techniques will be discussed with the City prior to doing a risk analysis.
 - Present results of Tasks 3 and 4 to City to decide best course of action.

Task 5: Evaluate options to control leachate migration and/or remove leachate from the unlined cell.

Options to be looked at include (but are not limited to):

- Enhanced final cover over cell to reduce leachate generation.
- Trench drains across leachate plume to collect migrating leachate. This might be through waste or outside of the fill area.
- Dewatering wells; vertical and/or horizontal.
- Slurry wall to stop migration.
- Develop Conceptual Design and cost estimates for each option to allow City to choose their preferred option.

Task 6: Evaluate options to treat/manage any collected leachate.

Options to be considered (but not limited to):

- On-site handling – new system, or with existing leachate ponds
- Routing to City Wastewater Treatment Plant
 - Via trucking
 - Connection to nearest sanitary sewer
 - Can WWTP handle the needed volume and quality of the leachate?
 - Need for leachate pretreatment
- Leachate Recirculation
- Develop Conceptual Design and cost estimates for each option.

Task 7: Feasibility Study

Feasibility Study report will be prepared presenting all of the above (Tasks 5 and 6) and recommending a preferred strategy to the City.

- Meet with City to present findings and recommendations.
- Final report with City review and comments.
- Submit Feasibility Study Report to DENR. Meet with SDDENR to present the report and its findings.
- It will be critical for Wenck to work closely with the City throughout the entire process to ensure the best product is obtained for the City, meeting your goals and expectations.

Scope of Services That May Be Amended

City of Rapid City, may, at its discretion, contract with Wenck Associates, Inc. for subsequent project phases such as Final Design Phase and Construction Monitoring Phase.

Schedule

In keeping with the City's request, Wenck will use an aggressive schedule to complete the process through the investigative phase. We propose the following:

Notice to Proceed with Design	By February 19, 2008
Kick-off Meeting	Week of February 25, 2008
Investigation Workplan to City	By March 7, 2008
Investigation Workplan to DENR	By March 14, 2008
Meeting with DENR	March 19, 2008
Field Investigation Complete	By April 4, 2008
Leachate Migration Assessment Report to City	By June 6, 2008
Leachate Migration Assessment Report Final	By June 13, 2008
Feasibility Study Report to City	By July 11, 2008
Meeting with City to Decide Final Strategy	Week of July 14, 2008
Presentation to SDDENR	Week of July 14, 2008



Cost Estimate

See attached Table 1 for proposed fees for Tasks 1 through 7.

TABLE 1
Cost Estimate for Engineering Services for Leachate Removal and Remediation
City of Rapid City Landfill, South Dakota
Wenck # 1760-00

-- Estimated Hours --

Task	\$154	\$154	\$85	\$94	\$94	\$144	\$78	Subtotal		Sub-	Subtotal
	Project Manager	Principal and Sr. QC	Hydro- geologist	Engineer	CADD Designer	Risk Assessor	Clerical	Hours	Expenses	Contractors ⁽¹⁾	Costs
1. Investigation workplan and coordination with the City (2 meetings)	48	4	60	8	8	4	6	138	\$3,000	\$1,650 ⁽²⁾	\$20,306
2. Field Investigation	8		72					80	\$2,000	\$21,120 ⁽³⁾	\$30,472
3. Leachate Migration Assessment Report	12	4	40	8	16		8	88	\$500		\$9,244
4. Risk Assessment	6					40	4	50	\$200		\$7,196
5. Leachate Control Options	8	4		40	16		4	72	\$200		\$7,624
6. Leachate Treatment Options	6		24		16		4	50	\$200		\$4,980
7. Feasibility Study Report & Meetings with City and SDDENR	24	2		40	8		6	80	\$1,200		\$10,184
Subtotals	112	14	196	96	64	44	32	558	\$7,300	\$22,770	\$90,006

Project Total = \$90,006

(1) Subcontractors will be billed at actual expense plus 10%.

(2) Laboratory Services, MVTL, Inc. of Bismarck -- 2 leachate characterization samples - expedited turnaround.

(3) Driller - Interstate Drilling of Thompson, ND - ~\$10,000 (see quote) + 10%
 Laboratory Service, MVTL, Inc. of Bismarck, ND --\$8,000+10%
 [15 samples @ \$500/ea + Shipping]
 Surveyor - Local surveyor for temporary wells for elevations-\$1200+10%

Project Breakdown:
 Wenck - \$59,636
 Expenses - \$7,300
 Subcontractors - \$22,770

Estimated Fees

EXHIBIT II

WENCK ASSOCIATES, INC.
PROFESSIONAL ENGINEERING FEE SCHEDULE
JANUARY 2008

	<u>Hourly Rate</u>
General Office	\$55.00
Clerical	\$61.00
Technician/Word Processor	\$69.00
Field Technician/Sr. Word Processor	\$78.00
Junior Engineer/Junior Scientist	\$85.00
Assistant Engineer/Assistant Scientist	\$94.00
Engineer/Scientist	\$104.00
Engineer II/Scientist II	\$112.00
Engineer III/Scientist III/Designer	\$123.00
Senior Engineer/Senior Scientist	\$133.00
Project Engineer/Project Professional	\$144.00
Supervising Engineer/Supervising Professional	\$154.00

- *Subcontracted services will be billed at cost plus 10 percent.*
- *Mileage will be billed at the IRS approved rate.*
- *Reproductions will be billed at the rate of \$0.15 per copy.*
- *AutoCAD/Intergraph/GIS/Modeling will be billed at a rate of \$10.00/hour.*
- *Invoices are due upon presentation. Invoice balances not paid within forty five (45) days of invoice date are subject to 1-1/2% (18% annual) interest or finance charge.*
- *Rates to be adjusted annually.*