

**RFQ# ADSPO14-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

(If a firm has branch offices, complete for each specific branch office seeking work.)

1. REVISED ADSPO13-00003465: Annual Request for Qualifications

a.	FIRM(ORBRANCHOFFICE)NAME:	Tetra Tech, Inc. (BAS)
b.	FIRM(ORBRANCHOFFICE)STREET:	3822 East University Drive, Suite 2
c.	FIRM(ORBRANCHOFFICE)CITY:	Phoenix
d.	FIRM(ORBRANCHOFFICE)STATE:	Arizona
e.	FIRM(ORBRANCHOFFICE)ZIP CODE:	85034
f.	YEARESTABLISHED:	1966

(g1).	OWNERSHIP-TYPE:	Corporation
(g2).	OWNERSHIP- SMALLBUSINESSSTATUS:	N/A

h.	POINTOFCONTACTNAMEANDTITLE:	Keith A. Johnson, P.E.
i.	POINTOFCONTACTTELEPHONENUMBER:	602-267-0336
j.	POINTOFCONTACTE-MAILADDRESS:	Keith.Johnson@tetrattech.com

k.	NAMEOFFIRM(<i>If block 1 is a branch office</i>):	Tetra Tech, Inc.
----	---	------------------

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person)

a. NAME Paul Jackson	b. ROLE IN THIS CONTRACT Staff Geologist	c. YEARS EXPERIENCE	
		1. TOTAL 5	2. WITH CURRENT FIRM 5
d. FIRM NAME AND LOCATION (City and State) Tetra Tech, Inc. (BAS), Phoenix, Arizona			
e. EDUCATION (Degree and Specialization) B. S. Geology University of Massachusetts		f. CURRENT PROFESSIONAL REGISTRATION (State and Discipline)	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Qualified to perform Butt Fusion on High Density Polyethylene Pipe. Certified EPA Method 9 Visible Emissions			

H. RELEVANT PROJECTS			
	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
1)	Landfill Gas NSPS Surface Emissions Monitoring, Phoenix, Arizona.	2013	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Performed NSPS surface emissions monitoring at Skunk Creek Landfill, SR85 Landfill, and 27th Avenue Landfill using a TVA-1000B Flame Ionization Detector. <input checked="" type="checkbox"/> Check if project performed with current firm		
2)	Landfill Gas Extraction Monitoring, Glendale, Arizona.	2009	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Performed landfill gas monitoring. Tuned well-field and performed field analysis of landfill gas well composition at the Glendale Landfill. <input checked="" type="checkbox"/> Check if project performed with current firm		
3)	Groundwater Well Installation, Eloy, Arizona	2010	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Oversaw drilling and installation of two new monitoring wells. Performed construction management, and lithology analysis on well cuttings. Provided quality assurance during the construction of each well. <input checked="" type="checkbox"/> Check if project performed with current firm		
4)	Landfill Gas System Construction Management, Glendale Landfill, Glendale, Arizona.	2008	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Provided engineering support during the expansion of the gas collection and control system. Provided construction management for the installation of both the vertical wells and lateral connections. Logged vertical well borings and provided quality assurance during the construction of each well. <input checked="" type="checkbox"/> Check if project performed with current firm		
5)	Landfill Gas System Construction Management, SR85 Landfill, Phoenix, Arizona	2010	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Provided engineering support during the installation of the gas collection and control system. Provided construction management for the installation of both the vertical wells and horizontal collectors. Logged vertical well borings and provided quality assurance during the construction of each well. <input checked="" type="checkbox"/> Check if project performed with current firm		

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person)

a. NAME Keith A. Johnson, P.E.		b. ROLE IN THIS CONTRACT Senior Project Manager		c. YEARS EXPERIENCE	
				1. TOTAL 34	2. WITH CURRENT FIRM 18
d. FIRM NAME AND LOCATION (City and State) Tetra Tech, Inc. (BAS) Phoenix, Arizona					
e. EDUCATION (Degree and Specialization) M.S. Construction, ASU, Del E. Webb School of Construction M.S. Civil Engineering, San Jose State University B.S. Geology, University of California at Berkeley			f. CURRENT PROFESSIONAL REGISTRATION (State and Discipline) Professional Engineer Arizona #27880, California #36659, Solid Waste Association of North American (SWANA) Certified Landfill Manager, 199		
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Certified Land Fill & Livestock Project Lead Verifier (2009), California Climate Action Registry. Accredited California Air Resources Board of Greenhouse Gas Verifier.					

H. RELEVANT PROJECTS					
	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)		
1)	Landfill Gas to Energy Project, Glendale Municipal Landfill, Glendale, Arizona	2013	2010		
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Design/build services to build a landfill gas-to-energy project at the City of Glendale Landfill. Construction of 69 k V substation for Arizona Public Service (APS) and an electrical interconnect to the APS grid. The design of the gas processing and compression skid and a 3,312 square foot concrete building for two Jenbacher J420 GS internal combustion engines.				
2)	Texas Brine Methane Venting System Design, Bayou Corne, Louisiana	2013	N/A		
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Design of the methane gas vent wells, piping and treatment systems. Methane gas was trapped in the upper portion of the Mississippi River Alluvial Aquifer. The vent wells consisted of steel casing installed with a sonic drill rig and perforated after installation. The vent wells were logged using geophysical methods to determine the depth of the gas bearing zone prior perforation. The vented methane was piped to small utility flares for destruction.				
3)	Landfill Gas to Energy Evaluation Report, Skunk Creek Landfill, Phoenix, Arizona	2013	N/A		
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Evaluation of the potential landfill gas to energy projects at the Skunk Creek Landfill. Report included landfill gas generation estimates, an extensive evaluation of the credits and incentives available, options for beneficial use of the gas, air permit considerations, and economic proformas.				
4)	Operation and Maintenance of Landfill Gas Management Systems, Phoenix Arizona	2013	N/A		
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Ongoing operation, maintenance, and monitoring of landfill gas extraction and treatment systems at the closed Skunk Creek Landfill (SCLF), the closed 27th Avenue Landfill and flare stations at the closed 19th Avenue Landfill. Overall objectives of the program are to minimize extraordinary expenditures by instituting and following a preventative maintenance program; ensuring that the LFGS is operated in a safe and efficient manner to avoid public complaints, permit violations, marginal or poor performance and excessive cost; and monitoring/tuning gas wells to minimize surface emissions.				
5)	Landfill Entrance Facility Construction Management, SR 85 Landfill, Buckeye, Arizona	2005	2006		
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Construction of the landfill's entrance facility. The project consisted of development of a vacant field with no utilities. Construction included the installation of a public water system, a sewer system, site electrical, buildings and paving.				

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person)

a. NAME R. Todd Livermore, P.E., CFM, LEED Green Associate		b. ROLE IN THIS CONTRACT Project Engineer		c. YEARS EXPERIENCE	
				1. TOTAL 6	2. WITH CURRENT FIRM 6
d. FIRM NAME AND LOCATION (City and State) Tetra Tech, Inc. (BAS), Phoenix, Arizona					
e. EDUCATION (Degree and Specialization) B.S., Civil and Environmental Engineering, Arizona State University M.S., Civil and Environmental Engineering, Arizona State University (In Progress)			f. CURRENT PROFESSIONAL REGISTRATION (State and Discipline) Professional I Engineer (Civil), Arizona # 49908 Certified Floodplain Manager # 762478, Association of State Floodplain Managers. LEED Green Associate # 10630318, U. S. Green Building Council/Green Building Certification Institute.		
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)					

H. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
1)	Stormwater Planning, Glendale Municipal Landfill, Maricopa County, Arizona.	2010	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Designed extensive storm water methodology, related facilities and components, to retain on-site surface runoff for future post-closure configuration of the landfill. Prepared many other aspects of the Landfill Master Plan. <input checked="" type="checkbox"/> Check if project performed with current firm		
2)	City of Glendale Municipal Landfill, Glendale, Arizona	2010	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Prepared a Significant SWFPA for submittal to ADEQ. The Significant SWFPA revised previous alert levels by performing calculations on results which included the most recent rounds of quarterly groundwater monitoring and also changed the period of groundwater monitoring events from quarterly to semi-annually. <input checked="" type="checkbox"/> Check if project performed with current firm		
3)	City of Phoenix 27th Avenue Landfill, Phoenix, Arizona	2010	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Designed an additional landfill gas header and laterals for connection to the existing perimeter landfill gas header. The genesis of the additional gas header and laterals was a conflict between the existing gas laterals and modifications to the entrance road and stormwater basin facilities resulting in the necessary removal of the existing gas laterals. <input checked="" type="checkbox"/> Check if project performed with current firm		
4)	City of Eloy Landfill – Landfill Master Plan, Eloy, Arizona	2010	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Design of the landfill's future configuration including future locations of the landfill gas flare station, entrance road, scale house, soil stock-pile area, tire storage area, white goods storage area, refuse fill patterns and sequencing, excavation sequencing and quantification, stormwater detention ponds, interim stormwater controls, site facilities and transfer station; and cost estimate for capital expenditures reflecting total site development and annual development. <input checked="" type="checkbox"/> Check if project performed with current firm		
5)	Colorado River Indian Tribes Landfill Closure Plan, Parker, Arizona	2011	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Closure plan included a geophysical investigation to determine the limits and depth of waste and a geotechnical investigation of potential borrow sources. On- and off-site stormwater controls including perimeter berms, perimeter channels, downdrain chutes, and large retention basins doubling as the borrow source were designed for the closure configuration. Erosion control was designed per the stormwater velocities to prevent scouring of the control system. Final closure plan was approved by the Tribe, the Indian Health Service, and the EPA. <input checked="" type="checkbox"/> Check if project performed with current firm		

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT *(Complete one Section 4 for each key person)*

a. NAME Thomas J. Sheber, P.E.	b. ROLE IN THIS CONTRACT Mechanical Engineer	c. YEARS EXPERIENCE	
		1. TOTAL 32	2. WITH CURRENT FIRM 2.75
d. FIRM NAME AND LOCATION <i>(City and State)</i> Tetra Tech, Inc. (BAS) Phoenix, Arizona			
e. EDUCATION <i>(Degree and Specialization)</i> B.S. Mechanical Engineering, University of Arizona Tucson		i. CURRENT PROFESSIONAL REGISTRATION <i>(State and Discipline)</i> Professional Engineer (Mechanical): Arizona # 36137, California # 23232, Iowa # 13144	
g. OTHER PROFESSIONAL QUALIFICATIONS <i>(Publications, Organizations, Training, Awards, etc.)</i> Pending Renewal: Registered Environmental Assessor (REA), CA EPA (REA-05064)			

H. RELEVANT PROJECTS

	(1) TITLE AND LOCATION <i>(City and State)</i>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION <i>(If applicable)</i>
1)	Oracle Ridge Mining, LLC Class II Air Quality Permitting, Pima County, Arizona	2012	N/A
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Prepare, submit, and secure a Class II Air Quality Permit for a proposed reopening of an underground copper mine and construction of associated beneficiation process facilities.		
2)	Solid Waste Landfill Site GHG Reporting, City of Phoenix, Arizona	2010-2012	N/A
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm GHG emissions calculations and reporting under Subpart HH using the U.S. Environmental Protection Agency (U.S. EPA) e-GGRT System for City of Phoenix State Route 85 Municipal Solid Waste Landfill, 27 th Avenue Municipal Solid Waste Landfill and the Skunk Creek Municipal Solid Waste Landfill.		
3)	Solid Waste Landfill Site GHG Reporting, City of Glendale, Arizona	2010-2012	N/A
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm GHG emissions calculations and reporting under Subpart HH and Subpart C using the U.S. EPA's e-GGRT System for City of Glendale Municipal Solid Waste Landfill.		
4)	Artillery Peak Mine Air Quality Permitting Memorandum, Northern Arizona attainment area (e.g., PSD area)	2013	N/A
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Review of applicable air quality regulations and corresponding permit requirements assessment for a proposed manganese mining operation. Regulatory reviews include New Source Review (NSR), Prevention of Significant Deterioration (PSD), New Source Performance Standards (NSPS), and National Emissions Standards for Hazardous Air Pollutants (NESHAPS).		
5)	Tier 2 NMOC Emissions Report, City of Casa Grande, Arizona	2011	N/A
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Preparation of a Tier 2 NMOC Emissions Report per Title 40 CFR 60, Subpart WWW. Analysis, using LandGEM, documented that the concentration of NMOC's in the landfill gas was well below the Clean Air Act default value of 4,000 ppmv as hexane.		

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present no more than five (5) projects. Complete one Section 5 for each project.)</i>	
--	--

a. TITLE AND LOCATION (City and State) SR85 Landfill, Phoenix, Arizona	b. YEAR COMPLETED <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">PROFESSIONAL SERVICES 2005-2006</td> <td style="width:50%;">CONSTRUCTION <i>(if applicable)</i></td> </tr> </table>	PROFESSIONAL SERVICES 2005-2006	CONSTRUCTION <i>(if applicable)</i>
PROFESSIONAL SERVICES 2005-2006	CONSTRUCTION <i>(if applicable)</i>		

23. PROJECT OWNER'S INFORMATION		
--	--	--

c. PROJECT OWNER City of Phoenix	d. DOLLAR AMOUNT OF PROJECT \$153K	e. TOTAL COST OF PROJECT \$28M
--	--	--

f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Tetra Tech, Inc. (BAS) has been providing planning, design, and construction management services in support of the development of this new landfill facility. This included design and construction oversight for a multi-functional entrance facility featuring scale house, administrative buildings, maintenance facilities, roadways, and drainage improvements. Tetra Tech, Inc. (BAS) is also providing landfill gas master planning and design for the landfill gas extraction and treatment system for the initial refuse disposal cells at the site. The landfill gas collection system (LFGCS) master plan developed by Tetra Tech, Inc. (BAS) will provide the client with the necessary information to more effectively manage landfill gas at the site, schedule construction, and allocate funds for system construction costs. The master plan calls for installation of the LFGCS in phases, and sizing the header and flare station to accommodate mid- to long-term LFG flow rates. The master plan consists of a series of plans depicting the phased expansion of the LFGCS, including project scheduling and cost information. The plan also provides for system expandability so the LFGCS can be easily expanded and extend to accommodate future LFG flows.

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

5.EXAMPLEPROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present no more than five (5) projects. Complete one Section 5 for each project.)</i>		
a. TITLE AND LOCATION <i>(City and State)</i>	b. YEAR COMPLETED	
	PROFESSIONALSERVICES	CONSTRUCTION <i>(If applicable)</i>
Texas Brine Company, LLC, Belle Rose, Louisiana. 70341	2012	2013
23. PROJECT OWNER'S INFORMATION		
c. PROJECT OWNER	d. DOLLAR AMOUNT OF PROJECT	e. TOTAL COST OF PROJECT
Scott Borne, Texas Brine Company, LLC.	\$2.5M	\$4M

g. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

The Louisiana Department of Natural Resources (LDNR), pursuant to the authority granted under Louisiana Revised Statute 30:1, et seq., and more particularly Louisiana Revised Statute, 30:6.1, issued the Texas Brine Company, L.L.C. (TBC) a Declaration of Emergency. The Declaration of Emergency was related to subsidence that has occurred immediately adjacent to the TBC Oxy Geismar No.3 well site and associated salt cavern. The subsidence resulted in a release of methane gas, in concentrations and pressures that constitute a threat to adjacent/nearby properties of Bayou Corne, Louisiana.

The TBC Grand Bayou facility is located in Assumption Parish in southern Louisiana. The facility is operated as a solution mining operation on the Neopoleonville Salt Dome. Tetra Tech, Inc., as TBC's consultant, developed a work plan to abate and remove the natural gas currently in the Mississippi River Alluvial Aquifer (MRAA). The source of the natural gas is attributed to the collapse of the Napoleonville Salt Dome cavern. The work plan involved the installation of natural gas vent wells in the upper MRAA, HDPE piping, and flare stations to destroy the gas. This work plan was approved by LDNR and implemented by Tetra Tech. Venting of the natural gas is ongoing.

**RFQ# ADSPO14-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present no more than five (5) projects. Complete one Section 5 for each project.)</i>	
--	--

a. TITLE AND LOCATION (City and State) Glendale Landfill, Glendale, Arizona	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES Current	CONSTRUCTION <i>(If applicable)</i> N/A

23. PROJECT OWNER'S INFORMATION		
--	--	--

c. PROJECT OWNER City of Glendale	d. DOLLAR AMOUNT OF PROJECT Various Task Order Contract	e. TOTAL COST OF PROJECT
---	---	---------------------------------

h. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Tetra Tech, Inc. (BAS) has been providing on-call landfill engineering support to the City of Glendale since 1999. Services provided have included review and update of the landfill master plan, development of interim fill sequencing plans, and design of improvements to the gas extraction and treatment system to meet NSPS requirements, permitting and ADEQ liaison, and preparation of end-use plans for the site's existing 140-acre footprint. Tetra Tech, Inc. (BAS) was also responsible for preparation of waste volume and composition estimates, waste in-flow growth projections, and air space utilization studies that were used to evaluate the disposal life and remaining capacity of the site. In addition, Tetra Tech, Inc. (BAS) performed a waste compaction analysis based on refuse volumes and annual aerial surveys.

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT
(Present no more than five (5) projects. Complete one Section 5 for each project.)

a. TITLE AND LOCATION <i>(City and State)</i>	b. YEAR COMPLETED	
Colorado River Indian Tribes (CRIT) Parker Dump and CRIT Landfill Closure Plan, Parker, Arizona	PROFESSIONAL SERVICES 2012	CONSTRUCTION <i>(If applicable)</i>

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER	d. DOLLAR AMOUNT OF PROJECT	e. TOTAL COST OF PROJECT
Indian Health Service (IHS)	\$125K	

i. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Under a contract with the Indian Health Service (IHS), Tetra Tech provided engineering services consisting of the preparation of a closure plan including cap design, construction plans and specifications for the Colorado River Indian Tribes (CRIT) Landfill (Landfill) and the Old Parker Dump (Dump) on the CRIT Reservation. The project was a concerted effort involving coordination between CRIT, IHS, United States Environmental Protection Agency (EPA), and Tetra Tech. Topographic mapping of both sites and tying each site's survey control to the IHS monuments was performed. Tetra Tech also performed geophysical surveys in order to estimate the horizontal and vertical extent of waste. In conjunction with representatives from the CRIT and IHS, final cover borrow sources were identified. Soil samples were obtained for each borrow source. After receiving the laboratory test results Tetra Tech modeled several final cover systems. Leachate generation was assessed using the Hydrologic Evaluation of Landfill Performance (HELP) model, version 3.7 and UNSAT-H Version 2.03. Construction level plans, specifications and cost estimates were prepared after the final cover system was selected. The 25-yr, 24-hr storm event was used in conjunction with the United States Army Corps of Engineers (USACE) Hydrologic Engineering Center (HEC) HEC-HMS software program to determine the timing and volume of stormwater required to be retained on-site. On-site stormwater was directed by top deck slopes to perimeter drainage channels and into an overly large retention basin. The retention basin was over-sized because its location is used as the borrow source to be used for fill grading over the waste footprint. Off-site flow for the 25-yr, 24-hr storm event was analyzed using the USACE HEC-HMS software program. It was directed around and prevented from co-mingling with on-site stormwater through the use of perimeter berms. The construction plans and specifications included current topography, final grading and drainage plans, cross-sections, 25-yr hydrology map, and stormwater control and fencing details.

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT
(Present no more than five (5) projects. Complete one Section 5 for each project.)

a. TITLE AND LOCATION <i>(City and State)</i> Sundog Ranch Landfill Final Cap Maintenance and Repairs, Prescott, Arizona	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2012-2013	CONSTRUCTION <i>(if applicable)</i> 2014

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER City of Prescott	d. DOLLAR AMOUNT OF PROJECT \$80K	e. TOTAL COST OF PROJECT (TBD)
--------------------------------------	--------------------------------------	-----------------------------------

j. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

As a design-build project to provide maintenance and repair to the final cap as well as improved stormwater control methodology and structures, Tetra Tech BAS, Inc. (Tt-BAS) obtained current topography, reviewed the Closure Plan and performed an ADEQ file review for the City of Prescott's Sundog Ranch Landfill. Tt-BAS investigated the integrity of the existing Final Cap and evaluated existing stormwater drainage controls. Tt-BAS prepared a design construction package consisting of construction plans having received a constructability review, specifications and quality assurance plan, and an engineer's cost estimate. Bids on the Project are due in December 2013 with construction anticipated in early 2014. The Project will be overseen to completion by Tt-BAS.

6. ADDITIONAL INFORMATION

a. PROVIDE ANY ADDITIONAL INFORMATION YOU FEEL MAY BE NECESSARY TO DESCRIBE YOUR FIRMS QUALIFICATIONS. (ATTACH ADDITIONAL SHEETS AS NEEDED.)

Tetra Tech BAS

Engineering & Consulting Services

Tetra Tech BAS is a solid waste, environmental, and civil infrastructure firm with more than 25 years of experience managing landfill and hazardous waste projects for municipal and commercial clients. Tetra Tech BAS supports the full waste management project life cycle, from planning to engineering, construction, and operations and maintenance. Tetra Tech BAS also provides specialized services including landfill gas management, geotechnical consulting, and public infrastructure support services.

Tetra Tech offers the public and private sectors to plan, develop, and operate infrastructure to manage the processing, transferring, recycling, and disposing of solid and hazardous waste. Increasingly, owners and operators of solid waste systems are compelled to implement practices that protect the environment, function economically, and improve sustainability over the long term. Emerging regulations governing greenhouse gas emissions are changing how communities monitor and report their waste processing and disposal practices.

From solid waste facility design and daily on-site support to awarding-winning end-use planning, Tetra Tech's broad and experienced team complements our corporate resources and financial strength to self-perform projects as an integrated design-build team. Tetra Tech is your partner for practical, sustainable solutions that make best use of available resources.

Our clients require skills in science, engineering, construction, operations, and regulatory compliance. Tetra Tech has the experience and the resources to provide solutions to the most complex solid waste management challenges: planning, permitting, design, and construction.

Planning and Permitting:

- Facility Permits and Regulatory Documents
- Facility Master Plans
- Regulatory Compliance
- Corrective Action Planning
- Economic Feasibility and Cost Benefit Analysis
- Liability Analysis
- Automation Design/Planning
- Risk analysis

Engineering and Design:

- Landfill Expansion and Optimization
- Fill Sequencing
- Liner and Cover Design
- Leachate Management

- Stormwater Management
- Civil Infrastructure
- Material Recovery Facilities
- Transfer Stations
- Industrial Waste Containment
- Geotechnical Engineering

Landfill Gas Management:

- Air Permitting
- Landfill Gas Wells and Probes
- Extraction and Conveyance Design
- Landfill Gas Treatment
- Condensate Management
- Instrumentation and Controls
- Landfill Gas System Construction
- In Operations Support
- Engine Maintenance
- Landfill Gas to Energy

Construction:

- Excavation and Grading
- Geosynthetics Supply and Installation
- Landfill Gas Management Systems
- Gas Well Drilling
- Landfill Gas Pipelines
- Leachate Management Systems
- Source Containment/Slurry Walls
- Stormwater and Erosion Controls
- CM/CQA

Operations Support:

- Landfill Gas Management System Operation and Maintenance
- Corrective Action System Operation and Maintenance
- Groundwater and Stormwater Monitoring
- Data Evaluation and Reporting
- Closure and Post-Closure Maintenance and Monitoring
- Emergency Response
- Landfill Gas System Assessments
- Landfill Gas Engine Operations and Maintenance

Sustainability Planning:

- Zero Waste Planning
- Greenhouse Gas Analysis and Verification
- Facility Optimization

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

- Waste Conversion Planning
- Renewable Energy Evaluation
- Solar Energy Landfill Caps
- Odor Control
- Sustainability Review

7. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

a. Percentage of Total Work Attributable to State, Federal and Municipal Government Work:	80
b. Percentage of Total Work Attributable to Non-Government Work:	20

8. AUTHORIZED REPRESENTATIVE. The foregoing is a statement of facts.

Signature: 

Date: December 5, 2013

Name: Keith Johnson

Title: Senior Engineering Project Manager