



BOARD OF SUPERVISORS AGENDA ITEM REPORT
CONTRACTS / AWARDS / GRANTS

Requested Board Meeting Date: May 17, 2016

or Procurement Director Award ☐

Contractor/Vendor Name (DBA): Haley & Aldrich, Inc. (Headquarters: Burlington, MA)

Project Title/Description:

El Camino del Cerro Landfill Remediation Project (211047).

Purpose:

Award of Contract: Contract No. CT-DE-16- 276 to provide groundwater treatment system operation, maintenance and evaluation services for the El Camino del Cerro Landfill Remediation Project in an amount of \$494,567.63 for a contract term from May 17, 2016, to May 16, 2018. Administering Department: Environmental Quality.

Procurement Method:

Pursuant to the Direct Select authority of A.R.S. § 34-103 and Pima County Board of Supervisors Policy D29.1 (1), award for Solicitation No. 213796 is recommended to the above named Consultant, which has accepted the terms of the County's standard contract and with which the County has negotiated a satisfactory agreement.

Attachments: Approved Direct Select Request
Contract No. CT-DE-16-276

Program Goals/Predicted Outcomes:

The goal is to continue to operate the groundwater remediation system, perform groundwater quality evaluations and to reduce contamination to a point at which the pump and treat system can be turned off.

Public Benefit:

To prevent further migration of contaminated groundwater, reduce the mass and concentration of contamination, and protect public health.

Metrics Available to Measure Performance:

Groundwater contaminant concentrations and areal distribution.

Retroactive:

No.

20160517 10:41 AM

Procure Dept 04/29/16 PM0415

To: CoB- 5.2-16 (1)
Ver. - 1
Pgs. - 18 Addd.

Original Information

Document Type: CT Department Code: DE Contract Number (i.e., 15-123): 16-276
Effective Date: 05/17/16 Termination Date: 5/16/18 Prior Contract Number (Synergen/CMS): _____
☒ Expense Amount: \$ 494,567.63 ☐ Revenue Amount: \$ _____
Funding Source(s): 1997 General Obligation Bond Fund

Cost to Pima County General Fund: _____

Contract is fully or partially funded with Federal Funds? ☐ Yes ☒ No ☐ Not Applicable to Grant Awards

Were insurance or indemnity clauses modified? ☐ Yes ☒ No ☐ Not Applicable to Grant Awards

Vendor is using a Social Security Number? ☐ Yes ☒ No ☐ Not Applicable to Grant Awards

If Yes, attach the required form per Administrative Procedure 22-73.

Amendment Information

Document Type: _____ Department Code: _____ Contract Number (i.e., 15-123): _____

Amendment No.: _____ AMS Version No.: _____

Effective Date: _____ New Termination Date: _____

☐ Expense ☐ Revenue ☐ Increase ☐ Decrease Amount This Amendment: \$ _____

Funding Source(s): _____

Cost to Pima County General Fund: _____

Contact: Ana Wilber [Signature] 4/21/16

Department: Procurement [Signature] 4/21/16 Telephone: 520-724-8166

Department Director Signature/Date: [Signature] 4-22-16

Deputy County Administrator Signature/Date: [Signature] 4/28/16

County Administrator Signature/Date: [Signature] 4/29/16
(Required for Board Agenda/Addendum Items)



MEMORANDUM

DATE: February 26, 2016

TO: Mary Jo Furphy
Director, Procurement

FROM: Ursula K. Nelson, P.E. *UKN*
Director, PDEQ

RE: El Camino del Cerro Engineering Procurement

Pima County has been conducting groundwater remediation work at the El Camino del Cerro Landfill (CDC) since 2006, using a pump and treat system that was designed, operated, relocated and maintained by the present project manager of the consulting firm Haley & Aldrich. The contract with Haley & Aldrich expires on March 17, 2016.

It is important that the County's remedial efforts continue and progress toward a final solution through agreement with the Arizona Department of Environmental Quality (ADEQ).

In anticipation of these efforts, PDEQ requests approval to hire the firm of Haley & Aldrich under section ~~11-12-060-D~~ of the Procurement Code. Justification for this request is as follows:

- P.S.*
34-103 mtf
- Haley & Aldrich is uniquely qualified to continue the groundwater remediation efforts without spending time and money on extensive historical review. Haley & Aldrich has been performing the remedial work, operating and maintaining the groundwater extraction and treatment system, monitoring effectiveness of the treatment, constructing monitoring and extraction wells, and managing compliance with the NPDES discharge permit.
 - It is necessary and important to actively remediate groundwater contamination. Continuation of the effort is critical to achieving groundwater levels which meet standards set by ADEQ.
 - There is extensive background information on previous investigations and reports for CDC. Haley & Aldrich is familiar with this information based on their previous work for the County. It would take significant time and money for staff at another company to become as knowledgeable as Haley & Aldrich.

Memo to M.J. Furphy, Procurement
February 26, 2016
Re: El Camino del Cerro Engineering Procurement
Page Two

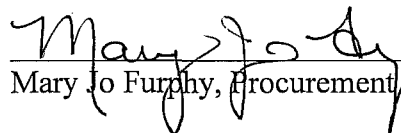
- Because of their ability to save the County time and money on this project, as well as their demonstrated technical expertise, it is in the best interest of Pima County to hire the firm Haley & Aldrich.

Thank you for your consideration. I am available at X4-7454 to answer any questions you may have regarding this request.

UKN/DE/vb

cc: John M. Bernal, Deputy County Administrator for PW
Dave Eaker, Deputy Director for SW Division, PDEQ

APPROVED:

 3/1/16
Mary Jo Furphy, Procurement Director Date

PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY

PROJECT: El Camino del Cerro Landfill Remediation
Project (211047)

CONSULTANT: Haley & Aldrich, Inc.
600 South Meyer Avenue, Suite 100
Tucson, AZ 85701

AMOUNT: \$494,567.63

FUNDING: 1997 General Obligation Bond Fund

CONTRACT

NO. CT-DE-16-276

AMENDMENT NO. _____

This number must appear on all
invoices, correspondence and
documents pertaining to this
contract.

CONSULTANT SERVICES CONTRACT

This CONTRACT is entered into between Pima County, a body politic and corporate of the State of Arizona, hereinafter called COUNTY, and Haley & Aldrich, Inc., hereinafter called CONSULTANT, collectively referred to as the Parties.

WITNESSETH

WHEREAS, COUNTY requires the services of a CONSULTANT qualified to provide groundwater treatment system operation, maintenance and evaluation services for the El Camino del Cerro Remediation Project (herein referred to as 'Project'); and

WHEREAS, CONSULTANT is qualified and willing to provide such services; and

WHEREAS, due to its past project experience with COUNTY and knowledge of the geographic area, CONSULTANT was determined under the direct select provisions of A.R.S. § 34-103.D.1 and Board of Supervisors Policy D29.1 (C) and (D) to be the best source for said work; and

WHEREAS, CONSULTANT has proposed to perform the work at a price acceptable to COUNTY.

NOW, THEREFORE, in consideration of the foregoing recitals and other valuable and good consideration the Parties agree as follows:

ARTICLE I – TERM AND EXTENSION/RENEWAL/CHANGES

This Contract as approved by the Board of Supervisors commences on May 17, 2016, and terminates on May 16, 2018, unless sooner terminated or further extended pursuant to the provisions of this Contract.

COUNTY shall have the option to extend the contract termination date for purposes of project completion. Any modification or extension of the contract termination date shall be by formal written amendment executed by the parties hereto.

All warranty and indemnification obligations under this contract shall survive expiration or termination of the contract, unless expressly provided otherwise. Any indemnification provision inconsistent with A.R.S. § 34-226 is, in all cases, not void, but will be interpreted and applied as if it were consistent with A.R.S. § 34-226.

ARTICLE 2 – SCOPE OF SERVICES

CONSULTANT agrees to provide Professional Services for the Project in accordance with generally accepted practices of engineers and/or scientists providing similar services at the same time, in the same locale, and under like circumstances for the COUNTY as described in **EXHIBIT A: SCOPE OF SERVICES** (5 pages), attached to this Contract.

Amendments and changes to the Scope must be approved by the Board of Supervisors or the Procurement

Director, as required by the Pima County Procurement Code, before the work under the amendment commences.

ARTICLE 3 – COMPENSATION AND PAYMENT

In consideration of the services specified in this Contract, the COUNTY agrees to pay CONSULTANT Not to Exceed Four Hundred Ninety-Four Thousand, Five Hundred Sixty-Seven Dollars and Sixty Three Cents (\$494,567.63). CONSULTANT'S fees have been estimated in **EXHIBIT B: CONSULTANT FEE SCHEDULE** (3 pages), attached to this Contract. Payments will not exceed the amount shown in EXHIBIT "B" without the prior written consent of COUNTY. Hourly rates and all other rates included under this Contract will remain fixed throughout the term of the contract. The COUNTY may consider adjustments to rates in connection with any extensions of the contract term.

Unless otherwise agreed, CONSULTANT will submit invoices monthly. All invoices will be accompanied by a narrative description of the work performed during the period covered by the invoice, time accounting information, and an allocation of all direct costs, including reimbursable costs and SUBCONSULTANT charges, to the tasks identified in the Scope of Work for which those costs were incurred. The time accounting information should be sufficient to show the workers and hours worked by day for the period covered by the invoice. SUBCONSULTANT charges will be supported by appropriate documentation with each separate invoice submitted.

For the period of record retention required under Article 22, COUNTY reserves the right to question any payment made under this article and to require reimbursement therefor by setoff or otherwise for payments determined to be improper or contrary to the Contract or law.

CONSULTANT will not perform work in excess of the Contract Amount without prior authorization by an amendment executed by COUNTY. Work performed in excess of the Contract Amount without prior authorization by amendment is at CONSULTANT'S own risk.

ARTICLE 4 – INSURANCE

The Insurance Requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. COUNTY in no way warrants that the minimum limits contained herein are sufficient to protect the CONSULTANT from liabilities that arise out of the performance of the work under this Contract. The CONSULTANT is free to purchase additional insurance.

CONSULTANT'S insurance will be placed with companies licensed in the State of Arizona or hold approved non-admitted status on the Arizona Department of Insurance List of Qualified Unauthorized Insurers. Insurers will have an "A.M. Best" rating of not less than A- VII. COUNTY in no way warrants that the above-required minimum insurer rating is sufficient to protect the CONSULTANT from potential insurer insolvency.

4.1 Minimum Scope and Limits of Insurance:

CONSULTANT will procure and maintain, until all of their obligations have been discharged, coverage with limits of liability not less than those stated below.

- 4.1.1 Commercial General Liability (CGL) – Occurrence Form with limits of \$1,000,000 Each Occurrence and \$2,000,000 General Aggregate. Policy will include bodily injury, property damage, and broad form contractual liability coverage, and products – completed operations.
- 4.1.2 Business Automobile Liability – Bodily Injury and Property Damage for any owned, hired, and/or non-owned automobiles used in the performance of this Contract with a Combined Single Limit (CSL) of \$1,000,000.
- 4.1.3 Workers' Compensation and Employers' Liability - Statutory requirements and benefits. Coverage is compulsory for employers of one or more employees. Employer's Liability - \$500,000.
Note: The Workers' Compensation requirement will not apply to a CONSULTANT that is exempt under A.R.S. § 23-901, and when such CONSULTANT executes the appropriate COUNTY Sole Proprietor or Independent CONSULTANT waiver form.
- 4.1.4 Professional Liability (Errors and Omissions) Insurance – This insurance is required when soliciting work from licensed professionals. The policy limits will be not less than \$2,000,000

Each Claim and \$2,000,000 Annual Aggregate. The policy will cover professional misconduct or negligent acts for those positions defined in the Scope of Work of this contract.

In the event that the Professional Liability insurance required by this Contract is written on a claims-made basis, CONSULTANT warrants that any retroactive date under the policy will precede the effective date of this Contract and, either continuous coverage will be maintained, or an extended discovery period will be exercised, for a period of two (2) years beginning at the time work under this Contract is completed.

Examples of Professional Services requiring E&O insurance: Accounting, Architecture, Asbestos Design, Inspection or Abatement Contractors, Licensed Health Care Practitioners, Legal Services, Engineering Services, or Surveying

4.2 Additional Insurance Requirements:

The policies will include, or be endorsed to include, as required by this written agreement, the following provisions:

- 4.2.1 Additional Insured Endorsement: The General Liability and Business Automobile Liability Policies will each be endorsed to include COUNTY, its departments, districts, boards, commissions, officers, officials, agents, and employees as additional insureds with respect to liability arising out of the activities performed by or on behalf of the CONSULTANT.
- 4.2.2 Subrogation Endorsement: The General Liability, Business Automobile Liability and Workers' Compensation Policies will each contain a waiver of subrogation endorsement in favor of COUNTY, and its departments, districts, boards, commissions, officers, officials, agents, and employees for losses arising from work performed by or on behalf of the CONSULTANT.
- 4.2.3 Primary Insurance Endorsement: The CONSULTANT'S policies will stipulate that the insurance afforded the CONSULTANT will be primary and that any insurance carried by the Department, its agents, officials, employees or COUNTY will be excess and not contributory insurance, as provided by A.R.S. § 41-621 (E).
- 4.2.4 Insurance provided by the CONSULTANT will not limit the CONSULTANT'S liability assumed under the indemnification provisions of this Contract.

4.3 Notice of Cancellation:

For each insurance policy required by the insurance provisions of this Contract, the CONSULTANT must provide to COUNTY, within two (2) business days of receipt, a notice if a policy is suspended, voided, or cancelled for any reason. Such notice will be mailed, emailed, hand-delivered or sent by facsimile transmission to (Enter Contracting Agency Representative's Name, Address, and Fax Number here).

4.4 Verification of Coverage:

CONSULTANT will furnish COUNTY with certificates of insurance (valid ACORD form or equivalent approved by COUNTY) as required by this Contract. An authorized representative of the insurer will sign the certificates.

- 4.4.1 All certificates and endorsements, as required by this written agreement, are to be received and approved by COUNTY before work commences. Each insurance policy required by this Contract must be in effect at, or prior to, commencement of work under this Contract. Failure to maintain the insurance coverage or policies as required by this Contract, or to provide evidence of renewal, is a material breach of contract.
- 4.4.2 All certificates required by this Contract will be sent directly to the Department. COUNTY project or contract number and project description will be noted on the certificate of insurance. COUNTY reserves the right to require complete copies of all insurance policies required by this Contract at any time.

4.5 Approval and Modifications:

COUNTY Risk Management reserves the right to review or make modifications to the insurance limits, required coverage, or endorsements throughout the life of this contract, as deemed necessary. Such action will not require a formal Contract amendment but may be made by administrative action.

ARTICLE 5 – INDEMNIFICATION

To the fullest extent permitted by law, CONSULTANT indemnifies and holds harmless COUNTY, its officers, employees and agents from and against any and all suits, actions, legal administrative proceedings, claims or demands and costs attendant thereto, including reasonable attorney's fees and court costs, to the extent caused by any negligent, reckless or intentionally wrongful act or omission of CONSULTANT, its agents, employees or anyone acting under its direction or control or on its behalf in connection with performance of this Contract. The obligations under this Article do not extend to the negligence of COUNTY, its agents, employees or indemnities.

All warranty and indemnification obligations under this Contract survive expiration or termination of the Contract, unless expressly provided otherwise. Any indemnification provision inconsistent with A.R.S. § 34-226 is, in all cases, not void, but will be interpreted and applied as if it were consistent with A.R.S. § 34-226.

Upon request, CONSULTANT may fully indemnify and hold harmless any private property owner granting a right of entry to CONSULTANT for the purpose of completing the project.

ARTICLE 6 – COMPLIANCE WITH LAWS

CONSULTANT will comply with all applicable federal, state, and local laws, rules, regulations, standards and Executive Orders, without limitation to those designated within this Contract. The laws and regulations of the State of Arizona govern the rights of the Parties, the performance of this Contract, and any disputes hereunder. Any action relating to this Contract will be brought and maintained in Superior Court in Pima County. Any changes in the governing laws, rules, and regulations during the term of this Contract apply, but do not require an amendment.

ARTICLE 7 – STATUS OF CONSULTANT

The status of CONSULTANT is that of an independent contractor and CONSULTANT is not considered an employee of Pima County and is not entitled to receive any of the fringe benefits associated with regular employment, and will not be subject to the provisions of the merit system. CONSULTANT will be responsible for payment of all Federal, State and Local taxes associated with the compensation received by CONSULTANT from COUNTY. CONSULTANT will be responsible for program development and operation without supervision by COUNTY.

ARTICLE 8 – CONSULTANT'S PERFORMANCE

CONSULTANT will perform the work in accordance with the terms of the Contract and with the degree of care and skill required of any similarly situated Arizona registrant. CONSULTANT will employ suitably trained and skilled professional personnel to perform all required services under this Contract. Prior to changing any key personnel, especially those key personnel COUNTY relied upon in making this Contract, CONSULTANT will obtain the approval of COUNTY.

CONSULTANT is responsible for the professional quality, technical accuracy, timely completion, and the coordination of all its effort and other services furnished by CONSULTANT under this Agreement. Without additional compensation, CONSULTANT will correct or revise any errors, omissions, or other deficiencies in all products of its efforts and other services provided. This includes resolving any deficiencies arising out of the acts or omissions of CONSULTANT found during or after the course of the services performed by or for CONSULTANT under this Agreement, regardless of COUNTY having knowledge of or condoning or accepting the products or the services. Correction of such deficiencies will be at no cost to COUNTY.

ARTICLE 9 – NON-WAIVER

The failure of COUNTY to insist in any one or more instances upon full and complete compliance with any of the terms and provisions of this Contract or to take any action permitted as a result thereof is not a waiver or relinquishment of the right to insist upon full and complete performance of the same or any other covenant or condition either in the past or in the future. The acceptance by either party of sums less than may be due and owing it at any time is not an accord and satisfaction.

ARTICLE 10 – SUBCONSULTANT

CONSULTANT will be fully responsible for all acts and omissions of its SUBCONSULTANT and of persons directly or indirectly employed by SUBCONSULTANT and of persons for whose acts any of them may be liable to the same extent that CONSULTANT is responsible for the acts and omissions of persons directly employed by it. Nothing in this Contract creates any obligation on the part of COUNTY to pay or see to the payment of any money due any SUBCONSULTANT, except as may be required by law.

ARTICLE 11 – NON-ASSIGNMENT

CONSULTANT will not assign its rights to this Contract in whole or in part, without prior written approval of COUNTY. COUNTY may withhold assignment at its sole discretion, provided that COUNTY will not unreasonably withhold such approval.

ARTICLE 12 – NON-DISCRIMINATION

CONSULTANT will comply with all provisions and requirements of Arizona Executive Order 2009-09 which is hereby incorporated into this Contract as if set forth in full herein **including flow down of all provisions and requirements to any SUBCONSULTANTS**. During the performance of this Contract, CONSULTANT will not discriminate against any employee, client or any other individual in any way because of that person's age, race, creed, color, religion, sex, disability or national origin.

ARTICLE 13 – AMERICANS WITH DISABILITIES ACT

CONSULTANT will comply with all applicable provisions of the Americans with Disabilities Act (Public Law 101-336, 42 U.S.C. 12101-12213) and all applicable federal regulations under the Act, including 28 CFR Parts 35 and 36. If CONSULTANT is carrying out government programs or services on behalf of COUNTY, then CONSULTANT will maintain accessibility to the program to the same extent and degree that would be required of COUNTY under 28 CFR Sections 35.130, 35.133, 35.149 through 35.151, 35.160, 35.161 and 35.163. Failure to do so could result in the termination of this Agreement.

ARTICLE 14 – CANCELLATION FOR CONFLICT OF INTEREST

This Contract is subject to the provisions of A.R.S. §38-511 which provides in pertinent part:

"The state, its political subdivisions or any department of either may, within three years after its execution, cancel any contract, without penalty or further obligation, made by the state, its political subdivisions, or any of the departments or agencies of either if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the state, its political subdivisions or any of the departments or agencies of either is, at any time, while the contract or any extension of the contract is in effect, an employee or agent of any other party to the contract in any capacity or a consultant to any other party to the contract with respect to the subject matter of the contract."

ARTICLE 15 – TERMINATION OF CONTRACT FOR DEFAULT

- A. Upon a failure by CONSULTANT to cure a default under this Contract within ten (10) days of receipt of notice from COUNTY of the default, COUNTY may, in its sole discretion, terminate this Contract for default by written notice to CONSULTANT. In this event, COUNTY may take over the work and complete it by Contract or otherwise. CONSULTANT and its sureties, if any, will be liable for any damage to COUNTY resulting from CONSULTANT'S default, including any increased costs incurred by COUNTY in completing the work.
- B. The occurrence of any of the following constitutes an event of default:
 - 1. Abandonment of or refusal or failure to prosecute the work or any separable part thereof with the diligence that will insure completion within the time specified in this Contract, including any extension, or a failure to complete the work (or the separable part of the work) within the specified time;
 - 2. Persistent or repeated refusal or failure to supply enough properly skilled workers or materials to perform the work on schedule;
 - 3. Failure to provide competent supervision at the site;
 - 4. Failure to take down, rebuild, repair, alter or amend any defective or deficient work, or to remove any

defective or deficient Material

5. Failure to make prompt payment to SUBCONSULTANTS or suppliers for material or labor;
 6. Loss of CONSULTANT'S business or other required license or authority, or any curtailment or cessation for any reason of business or business operations that would substantially impair or preclude CONSULTANT'S performance of this Contract;
 7. Disregard of laws, ordinances, or the instructions of COUNTY or its representatives, or any otherwise substantial violation of any provision of the Contract; or
 8. If a voluntary or involuntary action for bankruptcy is commenced with respect to CONSULTANT, or CONSULTANT becomes insolvent, makes a general assignment for the benefit of creditors, or has a receiver or liquidator appointed in respect of its assets.
- C. In the event of a termination for default:
1. All finished and unfinished as-builts, shop drawings, documents, data, studies, surveys, drawings, photographs, reports and other information in whatever form, including electronic, acquired or prepared by CONSULTANT for this project become COUNTY'S property and will be delivered to COUNTY not later than five (5) business days after the effective date of the termination;
 2. COUNTY may withhold payments to CONSULTANT arising under this or any other Contract for the purpose of set-off until such time as the exact amount of damage due COUNTY from CONSULTANT is determined; and
 3. Subject to the immediately preceding subparagraph (2), COUNTY'S liability to CONSULTANT will not exceed the reasonable value of work satisfactorily performed prior to the date of termination for which payment has not been previously made.
- D. The Contract will not be terminated for default nor CONSULTANT charged with damages under this Article, if—
1. Excepting item (8) in paragraph B above, the event of default or delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of CONSULTANT. Examples of such causes include—
 - (i) Acts of God or of the public enemy,
 - (ii) Acts of the COUNTY in either its sovereign or contractual capacity,
 - (iii) Acts of another consultant in the performance of a Contract with the COUNTY,
 - (iv) Fires,
 - (v) Floods,
 - (vi) Epidemics,
 - (vii) Quarantine restrictions,
 - (viii) Strikes,
 - (ix) Freight embargoes,
 - (x) Unusually severe weather, or
 - (xi) Delays of SUBCONSULTANTS or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both CONSULTANT and the SUBCONSULTANTS or suppliers; and
 2. CONSULTANT, within three (3) days from the beginning of any event of default or delay (unless extended by COUNTY), notifies COUNTY in writing of the cause(s) therefor. In this circumstance, COUNTY will ascertain the facts and the extent of the resulting delay. If, in the judgment of COUNTY, the findings warrant such action, the time for completing the work may be extended.
- E. For the purposes of paragraph A above, "receipt of notice" includes receipt by hand by CONSULTANT'S onsite project manager, facsimile transmission, or under the Notices clause of this Contract.
- F. If, after termination of the Contract for default, it is determined that the CONSULTANT was not in default, or that the delay was excusable, the rights and obligations of the Parties will be the same as if the termination had been issued for the convenience of the COUNTY.
- G. The rights and remedies of COUNTY in this Article are cumulative and in addition to any other rights and remedies provided by law or under this Contract.

ARTICLE 16 – TERMINATION FOR CONVENIENCE OF COUNTY

COUNTY may terminate this Contract at any time by giving written notice to CONSULTANT of such termination

and specifying the effective date thereof, at least fifteen (15) days before the effective date of such termination. In that event, all finished or unfinished documents and other materials will, at the option of COUNTY, become its property. If COUNTY terminates the Contract as provided herein, COUNTY will pay CONSULTANT an amount based on the time and expenses incurred by CONSULTANT prior to the termination date. However, COUNTY will make no payment for anticipated profit on unperformed services.

ARTICLE 17 – NON-APPROPRIATION OF FUNDS

Notwithstanding any other provision in this Contract, COUNTY may terminate this Contract if for any reason the Pima County Board of Supervisors does not appropriate sufficient monies for the purpose of maintaining this Contract. In the event of such termination, COUNTY has no further obligation to CONSULTANT, other than payment for services rendered prior to termination.

ARTICLE 18 – NOTICES

Any notice required or permitted to be given under this Contract will be in writing and will be served by delivery or by certified mail upon the other party as follows:

COUNTY:

Ursula Kramer, Director
Pima County Department of Environmental Quality
33 North Stone Avenue, 7th Floor
Tucson, AZ 85701

CONSULTANT:

Mark Groseclose, R.G., Project Manager
Haley & Aldrich
600 South Meyer Avenue, Suite 100
Tucson, Arizona 85701

ARTICLE 19 – OTHER DOCUMENTS

CONSULTANT and COUNTY in entering into this Contract have relied upon information provided in the CONSULTANT'S response to a request for fee proposal. These documents are hereby incorporated into and made a part of this Contract as if set forth in full herein, to the extent not inconsistent with the provisions of this Contract. CONSULTANT will perform services in accordance with the terms of the Contract and at a level of care consistent with prevailing industry standards. In the event any provision of this contract is inconsistent with those of any other document, the contract provisions will prevail.

ARTICLE 20 – REMEDIES

Either party may pursue any remedies provided by law for the breach of this Contract, provided, however, that the procedures in ARTICLE 24 are first exhausted. No right or remedy is intended to be exclusive of any other right or remedy and each is cumulative and in addition to any other right or remedy existing at law or at equity or by virtue of this Contract.

ARTICLE 21 – SEVERABILITY

Each provision of this Contract stands alone, and any provision of this Contract found to be prohibited by law is ineffective to the extent of such prohibition without invalidating the remainder of this Contract.

ARTICLE 22 – BOOKS AND RECORDS

CONSULTANT will keep and maintain proper and complete books, records and accounts, which will be open at all reasonable times for inspection and audit by duly authorized representatives of COUNTY.

CONSULTANT will retain all records relating to this Contract at least five (5) years after its termination or cancellation or until any related pending proceeding or litigation has been closed, if later. Alternatively, CONSULTANT may, at its option, deliver such records to COUNTY for retention.

ARTICLE 23 – DELAYS

Neither party hereto is in default in the performance of its obligations hereunder to the extent that the performance of any such obligation is prevented or delayed by any cause, existing or future, which is beyond the reasonable control of such party.

ARTICLE 24 – DISPUTES

In the event of a dispute between COUNTY and CONSULTANT regarding any part of this Contract or the Parties' obligations or performance hereunder, either Party may request a special meeting between their respective representatives to resolve the dispute. If the dispute remains unresolved, then either Party may request escalation of the issue to a meeting between the Director of the Pima County Department administering this Contract and CONSULTANT'S counterpart official, such meeting to be held within one week of the request, unless otherwise agreed. If the dispute is still not resolved after that meeting, then either Party may pursue such remedy or remedies as may be available to them under the laws of the State of Arizona.

The Parties will continue performance of their respective obligations under this Contract notwithstanding the existence of any dispute.

ARTICLE 25 – OWNERSHIP OF DOCUMENTS

All original drawings, field data, estimates, field notes, plans, specifications, documents, reports, calculations, and other information developed by CONSULTANT under this Contract vest in and become the property of COUNTY and will be delivered to COUNTY upon completion or termination of the services, but CONSULTANT may retain and use copies thereof. COUNTY agrees that the material will not be used for any project other than the project for which it was designed without the express permission of CONSULTANT.

ARTICLE 26 – PUBLIC INFORMATION

Pursuant to A.R.S. § 39-121 et seq., and A.R.S. §§ 34-603(H), 604(H), in the case of construction or Architectural and Engineering services procured under A.R.S. Title 34, Chapter 6, all information submitted by CONSULTANT in any way related to this Contract, including, but not limited to, pricing, product specifications, work plans, and any supporting data becomes public information and upon request, is subject to release and/or review by the general public including competitors.

Any information submitted related to this Contract that CONSULTANT believes constitutes proprietary, trade secret or otherwise confidential information must be appropriately and prominently marked as CONFIDENTIAL prior to submittal to COUNTY and be accompanied by an index specifically identifying and describing the general contents of each page so marked. The index is a Public Record and should not include any information considered confidential.

Notwithstanding the above provisions, in the event records marked CONFIDENTIAL are requested for public release pursuant to A.R.S. § 39-121 et seq., COUNTY will release records marked CONFIDENTIAL ten (10) business days after the date of notice to CONSULTANT of the request for release, unless CONSULTANT has, within the ten (10) day period, secured a protective order, injunctive relief or other appropriate order from a court of competent jurisdiction, enjoining the release of the records. For the purposes of this paragraph, the day of the request for release is not counted in the time calculation. CONSULTANT will be notified of any request for such release on the same day of the request for public release or as soon thereafter as practicable.

COUNTY will not, under any circumstances, be responsible for securing a protective order or other relief enjoining the release of records marked CONFIDENTIAL, nor will COUNTY be in any way financially responsible for any costs associated with securing such an order.

ARTICLE 27 – LEGAL ARIZONA WORKERS ACT COMPLIANCE

CONSULTANT hereby warrants that it will at all times during the term of this Contract comply with all federal immigration laws applicable to CONSULTANT'S employment of its employees, and with the requirements of A.R.S. § 23-214 (A) (together the "State and Federal Immigration Laws"). CONSULTANT will further ensure that each SUBCONSULTANT who performs any work for CONSULTANT under this Contract likewise complies with the State and Federal Immigration Laws.

COUNTY has the right at any time to inspect the books and records of CONSULTANT and any SUBCONSULTANT in order to verify such party's compliance with the State and Federal Immigration Laws.

Any breach of CONSULTANT'S or any SUBCONSULTANT'S warranty of compliance with the State and Federal Immigration Laws, or of any other provision of this section, is a material breach of this Contract subjecting CONSULTANT to penalties up to and including suspension or termination of this Contract. If the breach is by a SUBCONSULTANT, and the subcontract is suspended or terminated as a result, CONSULTANT will take such steps as may be necessary to either self-perform the services that would have been provided under the subcontract or to retain a replacement SUBCONSULTANT (subject to COUNTY approval if SBE or DBE preferences apply), as soon as possible so as not to delay project completion.

CONSULTANT will advise each SUBCONSULTANT of COUNTY'S rights, and the SUBCONSULTANT'S obligations, under this Article by including a provision in each subcontract substantially in the following form:

"SUBCONSULTANT hereby warrants that it will at all times during the term of this contract comply with all federal immigration laws applicable to SUBCONSULTANT'S employees, and with the requirements of A.R.S. § 23-214 (A). SUBCONSULTANT further agrees that COUNTY may inspect the SUBCONSULTANT'S books and records to insure that SUBCONSULTANT is in compliance with these requirements. Any breach of this paragraph by SUBCONSULTANT is a material breach of this contract subjecting SUBCONSULTANT to penalties up to and including suspension or termination of this contract."

Any additional costs attributable directly or indirectly to remedial action under this Article are the responsibility of CONSULTANT. In the event that remedial action under this Article results in delay to one or more tasks on the critical path of CONSULTANT'S approved construction or critical milestones schedule, such period of delay will be excusable delay for which CONSULTANT is entitled to an extension of time, but not costs.

(THE REMAINDER OF PAGE IS INTENTIONALLY LEFT BLANK)

ARTICLE 28 – ENTIRE AGREEMENT

This document constitutes the entire agreement between the parties pertaining to the subject matter hereof, and all prior or contemporaneous agreements and understandings, oral or written, are hereby superseded and merged herein. This contract may be modified, amended, altered or extended only by a written Amendment signed by the parties.

IN WITNESS WHEREOF, the parties have affixed their signatures to this Contract on the dates written below.

PIMA COUNTY

CONSULTANT

Chair, Board of Supervisors

Signature

Date

Eric J. MEALS Vice President

Name and Title (Please Print)

ATTEST

4/27/16

Date

Clerk of the Board

Date

APPROVED AS TO FORM

[Signature]

Deputy County Attorney

TOBIN ROSEN

Name (Please Print)

4/27/16

Date

EXHIBIT “A”: SCOPE OF SERVICES (5 Pages)



HALEY & ALDRICH, INC.
One Arizona Center
400 E. Van Buren St., Suite 545
Phoenix, AZ 85004
602.760.2450

Scope of Work El Camino del Cerro Remediation Project

BACKGROUND

Pima County (County) Department of Environmental Quality has been conducting active remediation using pump and treat technology to clean up groundwater contaminated with low concentrations of chlorinated solvents beneath and downgradient of the El Camino del Cerro Landfill (Site), which is considered a part of the Shannon Road El Camino del Cerro Water Quality Assurance Revolving Fund Site by the Arizona Department of Environmental Quality (ADEQ). The current contract between Haley & Aldrich, Inc. (Haley & Aldrich) and the County to manage the execution of this project expires on 31 March 2016, and the County has requested that Haley & Aldrich prepare the following scope of work and cost estimate to continue providing hydrogeologic and engineering consulting services for the continued remediation and monitoring of the groundwater beneath the Site and other associated tasks. The scope of work and associated costs presented below have been prepared so that Haley & Aldrich may continue to provide services to the County for period of 2 years beginning when authorization to proceed has been received from the County.

SCOPE OF WORK

TASK 1: TREATMENT SYSTEM OPERATIONS & MAINTENANCE, ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM (AZPDES) MONITORING

Haley & Aldrich will be responsible to complete the following tasks during the contract period:

- Provide routine operations and maintenance on the remediation system (system) which includes the following:
 - Clean the blower air filter and lubricate the blower monthly, when operating.
 - Fill and mix the anti-scaling solution in the holding tank as needed (normally monthly when operating).
 - Monitor the metering pump for proper operation, when operating.
 - Monitor the extraction pump for proper operation, when operating.
 - Remove and inspect the stripper trays at least annually and clean the trays if calcium carbonate has built up on the stripper housing internal surfaces. (Note: If the anti-scaling agent has been properly dosed into the influent stream, then the formation of scale should not be a maintenance issue.)
 - Inspect and clean the stripper housing sump annually.
 - Purchase bulk quantities of the SeaQuest® sequestering agent from Aqua Smart Inc. The mixing tank is configured to use the dry powder form of the product. Under normal operating conditions, approximately 250 pounds of the product is used monthly.

- Keep all system measurement and safety components in good working order and replace components as necessary.
- To increase the radius of the zone of capture, replace the existing extraction pump installed within CDC-PEX2 with a new pump that will increase the system capacity to approach, but not exceed, 250 gallons per minute (gpm), the maximum design capacity of the air stripper. The AZPDES Permit allows a maximum discharge rate of 250 gpm.
- Conduct all monthly, semi-annual, and annual monitoring as prescribed by the AZPDES Permit and prepare the Discharge Monitoring Reports (DMRs) as required by the Permit for submittal to the County for review and signature. The County will submit each DMR to ADEQ. All DMRs shall have a PDF copy of the final laboratory report attached.
- Collect weekly system effluent pH measurements in accordance with the AZPDES Permit. The pH shall be recorded on monthly DMRs. At the same time, collect weekly system influent pH measurement, hour meter reading, and flow meter readings for system performance tracking.
- Collect monthly influent (untreated) samples from extraction well CDC-PEX2. This data shall be used to estimate the mass of volatile organic compounds (VOCs) removed from the groundwater during the period. The VOC concentrations, hour meter readings, and flow totalizer readings shall be tabulated and the estimate of VOC mass removed during the period calculated.
- Maintain records of the total volume of extracted groundwater for periodic submittal to the Arizona Department of Water Resources (ADWR), as required by the Permit to Withdraw Poor Quality Groundwater, and to the City of Tucson for recharge tracking.

Deliverable

Continuously update system performance tracking logs and prepare all AZPDES DMRs for County review and signature.

TASK 2: GROUNDWATER MONITORING, DATA VALIDATION AND MANAGEMENT

Haley & Aldrich will conduct one year of quarterly groundwater monitoring during the first year of the contract term, and then conduct semi-annual groundwater monitoring for the remainder of the contract term (six events). Sampling is to be conducted in general accordance with the February 2016 Sampling and Analysis Plan (SAP), prepared by Haley & Aldrich, Inc. After laboratory results are received, Haley & Aldrich will validate and compile all laboratory electronic data deliverables into an EQulS™ database to generate standardized tables of the laboratory results using the program, and a draft groundwater monitoring report will be prepared and submitted to the County for review. After addressing the County's comments, the report shall be finalized for submittal to ADEQ. The report format will be generally consistent with previous reports.

Deliverable

Six reports.

TASK 3: MONITORING WELL ABANDONMENT/INSTALLATION AND MISCELLANEOUS TASKS

Haley & Aldrich will manage the abandonment of up to four groundwater monitoring wells. One of the wells, CDC-PW2, requires a abandonment as part of a transfer of property recently concluded between the County and a private party. Monitoring wells CDC-W17 and CDC-W19 are non-operational due to pumping equipment being stuck inside the well casing. Attempts to remove the equipment have not been successful; therefore, the wells will be abandoned. Budget has been included to abandon a fourth monitoring well that has yet to be selected. For the abandonment effort, Haley & Aldrich will provide all project management and qualified field supervision labor; solicit bids from, select, and subcontract a licensed well services firm; and provide all permits and materials necessary for well abandonment in accordance with all ADWR regulations.

Haley & Aldrich will manage the installation of up to three new groundwater monitoring wells, and be responsible for the design of each well in accordance with all ADWR regulations. The general design of each well can be expected to be similar to monitoring well CDC-PW2R, which was installed by Haley & Aldrich in December 2014. Haley & Aldrich will provide all project management and qualified field supervision labor; solicit bids from, select, and subcontract a licensed well driller; and provide all permits and materials necessary for well installation in accordance with all ADWR regulations.

A Haley & Aldrich subcontractor will maintain each wellhead security cover, periodically lubricate pad locks, and clear and remove brush around system equipment and monitoring wells as necessary to provide safe worker access. Brush removal around CDC-W18 is required yearly at a minimum.

TASK 4: DATA ANALYSIS FOR DETERMINING MONITORED NATURAL ATTENUATION CHARACTERISTICS AND MEETINGS WITH ADEQ

As discussed in the February 2016 SAP, samples are to be collected and analyzed to determine if Monitored Natural Attenuation (MNA) is occurring at the Site. MNA parameters include nitrate, manganese, dissolved ferrous ion, sulfate, methane, ethane, ethene, total organic carbon, chloride, and field parameters such as dissolved oxygen, specific conductivity, redox potential, pH, and turbidity. In addition to the geochemical parameters, one round of bacterial sampling will be conducted to determine the current population of Dehalococcoides (DHC).

Following the completion of four rounds of quarterly sampling, the data is to be reviewed along with pertinent historical data to identify potential trends and seasonal variations. Increases and decreases in concentrations are to be evaluated, and field parameters, analytical testing results, and geochemical testing are to be analyzed to determine if MNA is occurring at the Site.

Laboratory analytical testing results are to be evaluated to determine if the plume is shrinking, is stable, or is expanding. This may be done by generating semi-logarithmic graphs of concentrations from wells versus time, versus distance, or by overlaying plume contour maps generated for each monitoring event.

In addition to the above, attenuation rates are to be determined along with an evaluation of geochemical parameters. The attenuation rate can be determined using a graphical/regression technique or by a mass balance approach. Geochemical parameters are to be evaluated to demonstrate the potential for biodegradation in groundwater. An evaluation of geochemical data is to be presented on maps showing distribution or plotted on charts against distance or contaminants of concern (COC) concentrations. The analysis of DHC will provide additional information and proof of the presence of bacteria capable of degrading chlorinated COCs.

**HALEY
ALDRICH**

Deliverable

A report will be generated documenting field procedures, findings, conclusions, and recommendations. The report will include, at a minimum, the following:

- Documentation of sampling procedures;
- Analytical laboratory results;
- Data evaluation and presentation of results (as described above);
- Conclusions from evaluation of data; and
- Recommendations concerning further action, if any.

Budget has been included in this task for key Haley & Aldrich staff to prepare for and attend up to two meetings with ADEQ to discuss the results of the MNA analysis and how the site-specific knowledge gained affects the County's future plans for monitoring and remediation.

TASK 5: MISCELLANEOUS INVESTIGATION/EVALUATION TASKS

Data indicates that a chlorinated hydrocarbon source is potentially present beneath the parcel located at 5135 N. Casa Grande Highway, which is known as the 4-HIRE property. Concentrations of VOCs in a non-potable domestic well located on the property have remained relatively constant during the period that remediation has been conducted at the Site, indicating the potential presence of a source.

Budget has been included to perform a soil vapor survey on the 4-HIRE property but is contingent upon obtaining an access agreement with the current owner. If access is not granted, then the survey will not be conducted.

If access is granted for the survey, the following scope of work will be performed:

- The survey will be undertaken in accordance with a design that would allow for sufficient characterization of the property, and results will be evaluated to determine contaminant characteristics, gradients, etc. The survey will, if required, include angled borings around the buildings on the property to assist with a adequate characterization of the property.
- A utility survey (Arizona Blue Stake) will be conducted prior to commencing any intrusive work on the property. If needed, a private utility locating firm will be contracted to perform a geophysical survey of the proposed drilling locations to check for subsurface utilities and/or obstacles prior to drilling. If angled borings are to be extended, such borings will be undertaken in a manner to prevent damage to underground obstructions including but not limited to utilities, footings, etc. A project-specific Health and Safety Plan will be developed for undertaking this work.
- Soil gas probes will be completed within a depth interval of 5 to 6 feet below ground surface. Sampling locations will be surveyed using hand-held global positioning system equipment. Dedicated soil vapor points will be constructed in accordance with appropriate standards for soil vapor surveys. The interior volume of the Teflon tubing will be purged of sufficient volume so as to ensure the conditions inside the tubing reflect soil vapor conditions. An initial screening of total organic volatile concentrations will be undertaken at each sampling location. Soil vapor samples will be collected into stainless steel 1-liter Summa canisters with a low flow regulator set for 10 minutes. Upon completion of sampling, the Summa canisters will be

**HALEY
ALDRICH**

submitted for laboratory analysis of VOCs using United States Environmental Protection Agency Test Method TO-15. Required quality assurance/quality control samples will be collected for this sampling program. A standard data deliverables package will be requested from the laboratory with the analysis being undertaken on a standard turnaround time.

- Following receipt of analytical data, a report will be prepared documenting field procedures, findings, conclusions, and recommendations. The report will include the following:
 - Documentation of field activities;
 - Property plan showing pertinent features;
 - Analytical laboratory results;
 - Data evaluation and presentation of pertinent findings; and
 - Recommendations concerning further action, if necessary.

The budget for this task may also be used to assist the County with miscellaneous tasks associated with responding to requests from ADEQ, as deemed necessary by the County. Such assignments may include a review of ADEQ requests for additional sampling, ADEQ consultant work plan review, field work monitoring, split sample collection, or data review and interpretation.

TASK 6: PROJECT MANAGEMENT /MEETINGS

Haley & Aldrich will provide project management, monthly invoicing, and attend meetings to update County staff at least quarterly during the contract period (up to eight 1-hour meetings). Invoices will include a brief summary of work completed for each billing period broken out by task. The summary for each task will provide the authorized task budget, the budget expended to-date, the remaining budget, the major work completed, and a description for each subcontractor invoice or material purchase for that task during the billing period. The labor detail will also provide a list of upcoming work to be completed.

G:\38858_Pima County\Project Management\Financials\2016-0318 SOW CDC Remediation\F.docx

**HALEY
ALDRICH**

EXHIBIT "B": CONSULTANT FEE SCHEDULE (3 Pages)

TABLE I - CONSULTANT BUDGET PROJECTIONS - 2-YEAR PERIOD

Pima County Department of Environmental Quality - Solid Waste Division
El Camino del Cerro Landfill Remediation Project
Tucson, Pima County, AZ

TASK	TASK DESCRIPTION (2 YEARS)	ESTIMATED COST
1	Treatment System Operations & Maintenance, AZPDES Monitoring	\$ 128,969.33
2	Groundwater Monitoring, Data Validation and Management	\$ 129,245.60
3a	Monitoring Well Abandonment & Miscellaneous Tasks	\$ 48,821.04
3b	Monitoring Well Installation	\$ 119,680.48
4	Data Analysis for Determining MNA Characteristics & ADEQ Meetings	\$ 24,146.40
5	Miscellaneous Investigation/Evaluation Tasks	\$ 25,046.18
6	Project Management/Meetings	\$ 18,658.60
	TOTAL COST PROJECTION - Tasks 1 - 6	\$ 494,567.63

TABLE II - COST ESTIMATE DETAIL

Pima County Department of Environmental Quality- Solid Waste Division
El Camino del Cero Remediation Project
Tucson, Pima County, Arizona

Cost Element	Rate Schedule	Task 1 - Treatment System Operations & Maintenance, AZPDES Monitoring				Task 2 - Groundwater Monitoring, Data Validation and Management				Task 3 - Monitoring Well Abandonment and Miscellaneous Tasks				Task 4 - Data Analysis for Determining MNA Characterization & Meetings with ADEQ				Task 5 - Miscellaneous Investigation/Evaluation Task				Task 6 - Project Management/Meeting			
		HOURS	DOLLARS	UNITS	DOLLARS	HOURS	DOLLARS	UNITS	DOLLARS	HOURS	DOLLARS	UNITS	DOLLARS	HOURS	DOLLARS	UNITS	DOLLARS	HOURS	DOLLARS	UNITS	DOLLARS	HOURS	DOLLARS	UNITS	DOLLARS
H&A Labor Costs	Employees																								
Br. Professional II	Groseclose, Mark B	432.0	\$2,001.12	hr	120	\$24,004	200	\$4,800.80		10	\$2,201	40	\$2,201	40	\$2,128	10	\$2,251	40	\$2,128	432.0	\$2,001.12	120	\$2,401.44	200	\$4,800.80
Br. Professional II	Threlkeld, Sam Hosh K	230.0	\$2,001.12	hr	20	\$4,004	30	\$4,800.80		10	\$2,201	40	\$2,201	40	\$2,128	24	\$2,251	40	\$2,128	230.0	\$2,001.12	20	\$4,004	30	\$4,800.80
Br. Professional II	Hogger, Paul E.	64.0	\$1,942.56	hr		\$0	24	\$4,800.80			\$0		\$0		\$0	92	\$2,201		\$0	64.0	\$1,942.56		\$0		\$0
Staff Professional I	Boocher, Vanessa R.	752.0	\$1,028.88	hr	202	\$20,576	300	\$3,057.60		100	\$10,288		\$0	10	\$1,042	24	\$2,494		\$0	752.0	\$1,028.88		\$0		\$0
Office Support	Office Support	104.0	\$1,207.77	hr	40	\$4,831		\$0			\$0		\$0	4	\$481		\$0		\$0	104.0	\$1,207.77		\$0		\$0
Staff Professional I	Bishop, Elizabeth J	40.0	\$1,207.77	hr		\$0		\$0			\$0		\$0		\$0		\$0		\$0	40.0	\$1,207.77		\$0		\$0
Field Lab Eng Tech/Geol. I-2	Ford, Kendra K	150.0	\$12,150	hr		\$0		\$0		120	\$12,150		\$0		\$0		\$0		\$0	150.0	\$12,150		\$0		\$0
TOTAL H&A Labor		1920.0			552.0	\$69,391	674.0	\$9,436	124.0	\$14,591	234.0	\$24,416	162.0	\$24,146	104.0	\$15,520	100.0	\$18,559	1920.0	\$261,083.63					
Subcontractors/Major Equipment	Direct Cost per Unit																								
Johnson Environmental Technologies	\$5,639.00	\$ 5,639	1	1	\$5,639		\$0		\$0		\$0		\$0		\$0	1	\$5,639		\$0	1.0	\$5,639		\$0		\$0
Pace Analytical (TO-15)	\$165.00	\$ 165	1	1	\$165		\$0		\$0		\$0		\$0		\$0	30	\$4,950		\$0	30.0	\$4,950		\$0		\$0
Air Group	\$165.00	\$ 165	1	1	\$165		\$0		\$0		\$0		\$0		\$0	30	\$4,950		\$0	30.0	\$4,950		\$0		\$0
Remediation Subcontractor (Vendor)	\$20,000.00	\$ 20,000	1	1	\$20,000		\$0		\$0	0.5	\$10,000		\$0		\$0		\$0		\$0	1.5	\$30,000		\$0		\$0
Yellow Jacket Drilling (well abandonment test)	\$20,000.00	\$ 20,000	1	1	\$20,000		\$0		\$0		\$0		\$0		\$0		\$0		\$0	1.0	\$20,000		\$0		\$0
Yellow Jacket Drilling (Est. CI new wells)	\$80,000.00	\$ 80,000	1	1	\$80,000		\$0		\$0	1	\$21,000		\$0		\$0		\$0		\$0	1.0	\$81,000		\$0		\$0
Pace Analytical (AZPDES Monthly - VOCs only)	\$50.00	\$ 50	sample	48	\$2,400		\$0		\$0		\$0		\$0		\$0		\$0		\$0	48.0	\$2,400		\$0		\$0
Pace Analytical (AZPDES Semi-Annual)	\$190.00	\$ 190	sample	4	\$760		\$0		\$0		\$0		\$0		\$0		\$0		\$0	4.0	\$760		\$0		\$0
Pace Analytical (AZPDES Annual)	\$260.00	\$ 260	sample	2	\$520		\$0		\$0		\$0		\$0		\$0		\$0		\$0	2.0	\$520		\$0		\$0
Pace Analytical (Quarterly)	\$326.00	\$ 326	sample	60	\$19,560		\$0		\$0		\$0		\$0		\$0		\$0		\$0	60.0	\$19,560		\$0		\$0
Pace Analytical (Betalococcolides)	\$125.00	\$ 125	sample	8	\$1,000		\$0		\$0		\$0		\$0		\$0		\$0		\$0	8.0	\$1,000		\$0		\$0
Pace Analytical (Semi-Annual)	\$236.00	\$ 236	sample	30	\$7,080		\$0		\$0		\$0		\$0		\$0		\$0		\$0	30.0	\$7,080		\$0		\$0
Total Subcontractors (includes 5% markup)					\$24,843		\$27,583		\$31,500		\$34,500		\$0		\$3,272		\$0		\$18,659						
Other Direct Costs (ODCs)	Direct Cost per Unit																								
Internal Equipment/Fees (no markup)																									
H&A Field Truck	\$25.00	\$25.00	day	24	\$2,400		\$1,700		\$0		\$0		\$0		\$0		\$0		\$0	60.0	\$1,500		\$0		\$0
pH standards	\$65.00	\$65.00	each	3	\$195		\$0		\$0		\$0		\$0		\$0		\$0		\$0	3.0	\$195		\$0		\$0
YSI Field Parameter Kit	\$420.00	\$420.00	year	1	\$420		\$2,520		\$0		\$0		\$0		\$0		\$0		\$0	6.0	\$2,520		\$0		\$0
Hydrazine/Trifluor	\$452.00	\$452.00	year	1	\$452		\$2,520		\$0		\$0		\$0		\$0		\$0		\$0	6.0	\$2,520		\$0		\$0
Communication Fee (% of Labor)	0.0%	\$0.00			\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	0.0	\$0		\$0		\$0
External Equipment/Fees	Direct Cost per Unit																								
Aquasent anti-scaling power (2 year supply)	\$25,000.00	\$ 25,000	1	1	\$25,000		\$0		\$0		\$0		\$0		\$0		\$0		\$0	1.0	\$25,000		\$0		\$0
Equipment Replacement	\$7,500.00	\$ 7,500	1	1	\$7,500		\$0		\$0	0.33	\$2,475		\$0		\$0		\$0		\$0	1.33	\$9,975		\$0		\$0
Misc Consumables (batteries, filters, etc.)	\$2,000.00	\$ 2,000	1	1	\$2,000		\$0		\$0		\$0		\$0		\$0		\$0		\$0	1.0	\$2,000		\$0		\$0
Total ODCs (includes 0% markup for External Equipment & Fees)					\$34,735		\$6,837		\$2,730		\$765		\$0		\$255		\$0		\$45,382.00						
TOTAL UNIT COSTS					\$128,969		\$129,246		\$48,821		\$119,680		\$24,146		\$25,046		\$18,659		\$494,567.63						
NUMBER OF UNITS / EVENTS					1		1		1		1		1		1		1		1						
TOTAL COSTS					\$128,969		\$129,246		\$48,821		\$119,680		\$24,146		\$25,046		\$18,659		\$494,567.63						

TABLE III - CONSULTANT LABOR CLASSIFICATIONS AND BILLING RATES

Pima County Department of Environmental Quality - Solid Waste Division

El Camino del Cerro Landfill Remediation Project

Tucson, Pima County, AZ

Firm Name: Haley & Aldrich Inc.**Project: El Camino del Cerro Landfill Remediation Project**

2014 Audited Overhead %	220.94
Profit %	10

LABOR CLASSIFICATION	DIRECT LABOR RATE	OVERHEAD	PROFIT	BILLING RATE
Senior Vice President	\$109.22	\$241.31	\$35.05	\$385.58
Vice President 2	\$83.61	\$184.73	\$26.83	\$295.18
Vice President 1	\$85.33	\$188.53	\$27.39	\$301.25
Senior Consultant	\$68.98	\$152.41	\$22.14	\$243.53
Senior Professional 8	\$57.56	\$127.16	\$18.47	\$203.19
Senior Professional 7	\$47.43	\$104.80	\$15.22	\$167.46
Senior Professional 6	\$38.03	\$84.02	\$12.20	\$134.25
Staff Professional 5	\$34.13	\$75.41	\$10.95	\$120.49
Staff Professional 4	\$29.08	\$64.25	\$9.33	\$102.66
Professional 3	\$27.21	\$60.12	\$8.73	\$96.06
Professional 2	\$24.53	\$54.20	\$7.87	\$86.60
Professional 1	\$22.25	\$49.16	\$7.14	\$78.55
Field Tech/Geologist 6-8	\$33.65	\$74.34	\$10.80	\$118.79
Field Tech/Geologist 4-5	\$26.75	\$59.10	\$8.59	\$94.44
Field Tech/Geologist 1-3	\$20.44	\$45.16	\$6.56	\$72.16
Senior CAD Operator	\$34.54	\$76.32	\$11.09	\$121.94
CAD Operator	\$30.08	\$66.46	\$9.65	\$106.19
Office Support	\$34.04	\$75.21	\$10.92	\$120.17