

DATE 12-22-06

ATTORNEY MJC

DEPT./INDEX NO. 424000

Contract #: 024-A-06/07-BOS

CONTRACT ROUTING SHEET

COPY

BY: KM
Date Prepared: 12/19/2006

Need Date: ASAP - Per Gerri

PROCESSING DEPARTMENT:

Department: Environmental Mgmt
Dept. Contact: Linda Milligin
Phone #: 6668
Department
Head Signature: Gerri Silva

CONTRACTOR:

Name: Field Solutions, Inc.
Address: 6276 San Ignacio, Suite A
San Jose, CA 95119
Phone: _____

RECEIVED
HUMAN RESOURCES DEPT
DEC 22 PM 4:00

CONTRACTING DEPARTMENT:

Environmental Management-CHARGE TO 424200

Service Requested: Leachate mound pumping, monthly well head monitoring, and reporting services at the Union Mine Disposal Site.

Contract Term: One Year Contract/Amendment Value: \$89,000.00

Compliance with Human Resources requirements? Yes: No:

Compliance verified by: Pending

COUNTY COUNSEL: (Must approve all contracts and MOU's)

Approved: Disapproved: Date: 12-22-06 By: [Signature]
Approved: Disapproved: Date: _____ By: _____

EL DORADO COUNTY COUNSEL
2006 DEC 22 AM 10:41

RISK MANAGEMENT: (All contracts and MOU's except boilerplate grant funding agreements)

Approved: Disapproved: Date: 12/27/00 By: [Signature]
Approved: Disapproved: Date: _____ By: _____

RECEIVED
HUMAN RESOURCES DEPT
DEC 27 PM 2:52

OTHER APPROVAL: (Specify department(s) participating or directly affected by this contract)

Departments:
Approved: Disapproved: Date: _____ By: _____
Approved: Disapproved: Date: _____ By: _____



Agreement No. 024-A-06/07-BOS
Between the County of El Dorado and
Field Solutions, Incorporated

THIS AGREEMENT No. 024-A-06/07-BOS made and entered by and between the County of El Dorado, a political subdivision of the State of California (hereinafter referred to as "County"), acting by and through County Service Area No. 10, a lawfully established County Service Area as defined by Government Code Section 25210 et seq., and Field Solutions, Incorporated, a corporation duly qualified to conduct business in the State of California, whose principal place of business is 6280 San Ignacio Ave., Suite P, San Jose, California 95119-1363 (hereinafter referred to as "Consultant").

WITNESSETH

WHEREAS, County has determined that it is necessary to obtain a Consultant to provide waste discharge monitoring, leachate mound pumping, reporting services, and landfill gas compliance monitoring at the Union Mine Disposal Site for the Environmental Management Department; and

WHEREAS, Consultant has represented to County that it is experienced and competent to perform the special services required hereunder and County has determined to rely upon such representations; and

WHEREAS, it is the intent of the parties hereto that such services are in conformity with all applicable federal, state and local laws; and

WHEREAS, County has determined that the provisions of such services provided by Consultant are in the public's best interest, are more economically and feasibly performed by outside independent consultants as well as authorized by El Dorado County Charter, Section 210 (b) (6) and/or Government Code 31000;

NOW, THEREFORE, County and Consultant mutually agree as follows:

ARTICLE I

Scope of Services: Consultant shall perform all professional and technical services and shall make available Consultants own personnel, materials and equipment necessary to perform the services, work, and tasks designated as outlined in Exhibit "A" marked "Scope of Work" incorporated herein and made by reference a part hereof (hereafter the "Work").

ARTICLE II

Standards for Work: Consultant will strive to perform services in a manner consistent with that level of care and skill ordinarily exercised by other members of the Consultant's profession currently

practicing in the same locality and under similar conditions. No other representation, express or implied, is included or intended in this agreement, or in any report, opinion, document, or other instrument of service.

ARTICLE III

Term: This Agreement shall become effective when fully executed by both parties hereto and shall expire one (1) year from the date of execution thereof. This Agreement may be extended for one additional year if mutually agreed between the parties hereto in writing no less than thirty (30) days prior to the expiration of the then current Agreement.

ARTICLE IV

Compensation for Services:

- A. For services provided herein, County agrees to compensate Consultant by Task, upon receipt of itemized invoice(s) detailing a description of Work performed. Payments shall be made within forty-five (45) days following County's receipt and approval of invoices(s). For the purposes hereof, the billing rate shall be in accordance with Exhibit "B" marked "Schedule of Charges" incorporated herein and made by reference a part hereof. The parties recognize that in the performance of this Agreement, Consultant may be required to perform other Work not listed on Exhibit "B." In such cases, Consultant shall be compensated at a price mutually agreed upon by County and Consultant and consistent with the prevailing market rate for such Work.
- B. The total compensation under this Agreement to Consultant **SHALL NOT EXCEED** the estimated Eighty Nine Thousand Dollars and No Cents (\$89,000) without prior written approval by the County.

ARTICLE V

Consultant Reporting: Reports on Services rendered by Consultant shall be submitted to County in the format, and under the conditions, outlined in the Work.

ARTICLE VI

Deliverables: Deliverables will be specified by the County for each individual assignment, and specific task assignments and work requirements will be specifically identified on a task-by-task basis. Failure to submit requested deliverables shall be grounds for termination of the Agreement, as provided in Article XIII.

ARTICLE VII

Ownership of Data: Upon completion or earlier termination of all work under this Agreement, ownership and title to all reports, documents, plans, (including digitized plans) specifications and estimates produced as part of this Agreement will automatically be vested in the County and no further Agreement will be necessary to transfer ownership to the County. The Consultant shall furnish the County all necessary copies of data needed to complete the review and approval process. Any reuse of such materials shall be done at the sole risk of the County.

ARTICLE VIII

Changes to Agreement: This Agreement may be amended by mutual consent of the parties hereto. Said amendments shall become effective only when in writing and fully executed by duly authorized officers of the parties hereto. There shall be no change in the Consultant's Administrator or sub consultants without prior written approval by the County's Administrator.

ARTICLE IX

Consultant to County: It is understood that the services provided under this Agreement shall be prepared in and with cooperation from County and its staff. It is further agreed that in all matters pertaining to this Agreement, Consultant shall act as Consultant only to County and shall not act as Consultant to any other individual or entity affected by this Agreement nor provide information in any manner to any party outside of this Agreement that would conflict with Consultant's responsibilities to County during term hereof.

ARTICLE X

Assignment and Delegation: Consultant is engaged by County for its unique qualifications and skills as well as those of their personnel. Consultant shall not subcontract, delegate, or assign services to be provided, in whole or in part, to any other person or entity without prior written consent of County.

ARTICLE XI

Independent Consultant/Liability: Consultant is, and shall be at all times, deemed independent and shall be wholly responsible for the manner in which it performs services required by terms of this Agreement. Consultant exclusively assumes responsibility for acts of its employees, associates, and sub consultants, if any are authorized herein, as they relate to services to be provided under this Agreement during the course and scope of their employment.

Consultant shall be responsible for performing the work under this Agreement in a safe, professional, skillful and a workmanlike manner and shall be liable for its own negligence and negligent acts of its employees and sub consultants. County shall have no right of control over the manner in which work is to be done and shall, therefore, not be charged with responsibility of preventing risk to Consultant or it's employees or sub consultants.

ARTICLE XII

Fiscal Considerations: The parties to this Agreement recognize and acknowledge that County is a political subdivision of the State of California. As such, El Dorado County is subject to the provisions of Article XVI, Section 18 of the California Constitution and other similar fiscal and procurement laws and regulations and may not expend funds for products; equipment or services not budgeted in a given fiscal year. It is further understood that in the normal course of County business, County will adopt a proposed budget prior to a given fiscal year, but that the final adoption of a budget does not occur until after the beginning of the fiscal year.

Notwithstanding any other provision of this Agreement to the contrary, County shall give notice of cancellation of this Agreement in the event of adoption of a proposed budget that does not provide for funds for the services, products, or equipment subject herein. Such notice shall become effective

upon the adoption of a final budget, which does not provide funding for this Agreement. Upon the effective date of such notice, this Agreement shall be automatically terminated and County released from any further liability hereunder.

In addition to the above, should the Board of Supervisors during the course of a given year for financial reasons reduce, or order a reduction, in the budget for any County department for which services were agreed to be performed, pursuant to this paragraph in the sole discretion of the County, this Agreement may be deemed to be canceled in its entirety subject to payment for services performed prior to cancellation.

ARTICLE XIII

Default, Termination, and Cancellation:

A. Default: Upon the occurrence of any default of the provisions of this Agreement, a party shall give written notice of said default to the party in default (notice). If the party in default does not cure the default within ten (10) days of the date of notice (time to cure), then such party shall be in default. The time to cure may be extended in the discretion of the party giving notice. Any extension of time to cure must be in writing, prepared by the party in default for signature by the party giving notice and must specify the reason(s) for the extension and the date in which the extension of time of to cure expires.

Notice given under this section shall specify the alleged default and the applicable Agreement provision and shall demand that the party in default perform the provisions of this Agreement within the applicable period of time. No such notice shall be deemed a termination of this Agreement unless the party giving notice so elects in this notice, or the party giving notice so elects in a subsequent written notice after the time to cure has expired.

- B. Bankruptcy: This Agreement, at the option of the County, shall be terminable in the case of bankruptcy, voluntary or involuntary, or insolvency of Consultant.
- C. Ceasing Performance: County may terminate this Agreement in the event Consultant ceases to operate as a business, or otherwise becomes unable to substantially perform any term or condition of this Agreement.
- D. Termination or Cancellation without Cause: County may terminate this Agreement in whole or in part seven (7) calendar days upon written notice by County for any reason. If such prior termination is effected, County will pay for satisfactory services rendered prior to the effective dates as set forth in the Notice of Termination provided to Consultant, and for such other services, which County may agree to in writing as necessary for Agreement resolution. In no event, however, shall County be obligated to pay more than the total amount of the Agreement. Upon receipt of a Notice of Termination, Consultant shall promptly discontinue all services affected, as of the effective date of termination set forth in such Notice of Termination, unless the notice directs otherwise. In the event of termination for default, County reserves the right to take over and complete the work by Agreement or by any other means.

ARTICLE XIV

Notice to Parties: All notices to be given by the parties hereto shall be in writing and served by depositing same in the United States Post Office, postage prepaid and registered. Notices to County shall be in duplicate and addressed as follows:

Gerri Silva, Environmental Management Interim Director
County of El Dorado
2850 Fairlane Ct.
Placerville, CA 95667

Or to such other location as the County directs.

Notices to Consultant shall be addressed as follows:

Patrick Lacey, CHI Field Services Manager
Field Solutions, Inc.
6280 San Ignacio Avenue, Suite P
San Jose, CA 95119-1363

Or to such other location as the Consultant directs.

ARTICLE XV

Indemnity: The Consultant shall defend, indemnify, and hold the County harmless against and from any and all claims, suits, losses, damages and liability for damages of every name, kind and description, including attorneys fees and costs incurred, brought for, or on account of, injuries to or death of any person, including but not limited to workers, County employees, and the public, or damage to property, or any economic or consequential losses, which are claimed to or in any way arise out of or are connected with the Consultant's services, operations, or performance hereunder, regardless of the existence or degree of fault or negligence on the part of the County, the Consultant, sub consultant(s) and employee(s) of any of these, except for the sole, or active negligence of the County, its officers and employees, or as expressly prohibited by statute. This duty of Consultant to indemnify and save County harmless includes the duties to defend set forth in California Civil Code Section 2778.

ARTICLE XVI

Insurance: Consultant shall provide proof of a policy of insurance satisfactory to the El Dorado County Risk Manager and documentation evidencing that Consultant maintains insurance that meets the following requirements:

- A. Full Worker's Compensation and Employer Liability Insurance covering all employees of Consultant as required by law in the State of California.
- B. Commercial General Liability Insurance of not less than One Million Dollars (\$1,000,000) combined a single limit per occurrence for bodily injury and property damage.

- C. Automobile Liability Insurance of not less than One Million Dollars (\$1,000,000) is required in the event motor vehicles are used by the Consultant in the performance of the Agreement.
- D. In the event Consultant is a licensed professional, and is performing professional services under this Agreement, professional liability (for example, malpractice insurance) is required with a limit of liability of not less than One Million Dollars (\$1,000,000) per occurrence.
- E. Consultant shall furnish a certificate of insurance satisfactory to the El Dorado County Risk Manager as evidence that the insurance required above is being maintained.
- F. The insurance will be issued by an insurance company acceptable to the Risk Management Division, or be provided through a partial or total self-insurance likewise acceptable to the Risk Management Division.
- G. Consultant agrees that the insurance required above shall be in effect at all times during the term of this Agreement. In the event said insurance coverage expires at any time or times during the term of this Agreement, Consultant agrees to provide at least thirty (30) days prior to a said expiration date, a new certificate of insurance evidencing insurance coverage as provided for herein for not less than the remainder of a term of the Agreement, or for a period of not less than one (1) year. New certificates of insurance are subject to the approval of the Risk Management Division and Consultant agrees that no work or services shall be performed prior to the giving of such approval. In the event the Consultant fails to keep in effect at all times insurance coverage as herein provided, County may, in addition to any other remedies it may have, terminate this Agreement upon the occurrence of such events.
- H. The certificate of insurance must include the following provisions stating that:
1. The insurer will not cancel the insures coverage without thirty (30) days prior written notice to County, and;
 2. The County of El Dorado, its officers, officials, employees, and volunteers are included as additionally insured, but only insofar as the operations under this Agreement are concerned. This provision shall apply to all liability policies except workers' compensation and professional liability insurance policies.
- I. The Consultant's insurance coverage shall be primary insurance as respects the County, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the County, its officers, officials, employees or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.
- J. Any deductibles or self-insured retention must be declared to and approved by the County, either: the insurer shall reduce or eliminate such deductibles or self-insured retention as respects the County, its officers, officials, employees, and volunteers; or the Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

- K. Any failure to comply with the reporting provisions of the policies shall not affect coverage provided to the County, its officers, officials, employees, or volunteers.
- L. The insurance companies shall have no recourse against the County of El Dorado, its officers and employees or any of them for payment of any premiums or assessments under any policy issued by any insurance company.
- M. Consultants' obligations shall not be limited by the foregoing insurance requirements and shall survive expiration of this Agreement.
- N. In the event Consultant cannot provide an occurrence policy, Consultant shall provide insurance covering claims made as a result of performance of this Agreement for not less than three (3) years following completion of performance of this Agreement.
- O. Certificates of insurance shall meet such additional standards as may be determined by the contracting County Department either independently or in consultation with the Risk Management Division, as essential for protection of the County.

ARTICLE XVII

Interest of Public Official: No official or employee of County who exercises any functions or responsibilities in review or approval of services to be provided by Consultant under this Agreement shall participate in or attempt to influence any decision relating to this Agreement which affects personal interest or interest of any corporation, partnership, or association in which he/she is directly or indirectly interested; nor shall any such official or employee of County have any interest, direct or indirect, in this Agreement or the proceeds thereof.

ARTICLE XVIII

Interest of Consultant: Consultant covenants that Consultant presently has no personal interest or financial interest, and shall not acquire same in any manner or degree in either: 1) any other Agreement connected with or directly affected by the services to be performed by this Agreement; or, 2) any other entities connected with or directly affected by the services to be performed by this Agreement. Consultant further covenants that in the performance of this Agreement no person having any such interest shall be employed by Consultant.

ARTICLE XIX

Withholding (Form 730): In accordance with changes in Internal Revenue Law, OASDI (Old Age, Survivors, & Disability Insurance) and income taxes may be withheld from any payments made under terms of this Agreement if Consultant falls under "Contract-Employee" category as determined by County prior to execution of Agreement.

ARTICLE XX

California Residency (Form 590): All independent Consultants providing services to the County must file a State of California Form 590, certifying their California residency or, in the case of a corporation, certifying that they have a permanent place of business in California. The Consultant will be required to submit a Form 590 prior to execution of an Agreement or County shall withhold

seven (7) percent of each payment made to the Consultant during the term of the Agreement. This requirement applies to any agreement/contract exceeding \$1,500.00.

ARTICLE XXI

Tax Payer Identification Number (Form W-9): All independent Consultants or Corporations providing services to the County must file a Department of the Treasury Internal Revenue Service Form W-9, certifying their Taxpayer Identification Number.

ARTICLE XXII

California Forum and Law: Any dispute resolution action arising out of this Agreement, including, but not limited to, litigation, mediation, or arbitration, shall be brought in El Dorado County, California, and shall be resolved in accordance with the laws of the State of California. Consultant waives any removal rights it might have under Code of Civil Procedure Section 394.

ARTICLE XXIII

Administrator: The County Officer or employee with responsibility for administering this Agreement is Greg Stanton, Environmental Health Manager, or his successor.

ARTICLE XXIV

Authorized Signatures: The parties to this Agreement represent that the undersigned individuals executing this Agreement on their respective behalf are fully authorized to do so by law or other appropriate instrument and to bind upon said parties to the obligations set forth herein.

ARTICLE XXV

Partial Invalidity: If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions will continue in full force and effect without being impaired or invalidated in any way.

ARTICLE XXVI

Venue: Any dispute resolution action arising out of this Agreement, including, but not limited to, litigation, mediation or arbitration, shall be brought in El Dorado County, California, and shall be resolved in accordance with the laws of the State of California. Consultant waives any removal rights it might have under Code of Civil Procedure Section 394.

ARTICLE XXVII

Confidentiality: Consultant shall maintain the confidentiality and privileged nature of all records together with any knowledge therein acquired, in accordance with all applicable State and Federal laws and regulations, as they may now exist or may hereafter be amended or changed. Consultant, and all Consultants staff, employees and representatives, shall not use or disclose, directly or indirectly at any time, any said confidential information, other than to the County Environmental Management Department for the purpose of, and in the performance of the Agreement. This confidentiality agreement shall survive after the expiration or termination of this Agreement.

ARTICLE XXIII

Entire Agreement: This document and the documents referred to herein or exhibit(s) hereto is the entire Agreement between the parties and they incorporate or supersede all prior written or oral Agreements or understandings.

REQUESTING DEPARTMENT CONCURRENCE:

By: Gerri Silva
Gerri Silva, M.S., REHS
Environmental Management Interim Director

Dated: December 21, 2006

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first below written.

-- COUNTY OF EL DORADO --

Dated: 1-23-07

By: *Helen K. Baumann*
Chair, **HELEN K. BAUMANN**
Board of Supervisors

ATTEST:

Cindy Keck, Clerk of the
Board of Supervisors

Dated: 1-23-07

By: *Lathrop Taha*
Deputy Clerk

-- CONSULTANT -

Field Solutions, Inc.

Dated: 1-5-07

By: *Patrick Lacey*
Patrick Lacey,
"President"

ATTEST:

Field Solutions, Inc.

Dated: 1-5-07

By: *James Butera*
James Butera,
"Corporate Secretary"

EXHIBIT "A"

SCOPE OF WORK

THE SCOPE FOR THE 2007 FSI CONTRACT IS BROKEN DOWN INTO TWO DISTINCT SECTIONS. SECTION 1 DETAILS THE SCOPE OF WORK TO BE PERFORMED IN LANDFILL GAS COMPLIANCE MONITORING AND DOCUMENTATION. SECTION 2 DETAILS THE SCOPE OF WORK TO BE PERFORMED IN COMPLIANCE WITH THE REQUIREMENTS OF THE REGIONAL WATER QUALITY CONTROL BOARD MONITORING AND REPORTING PROGRAM FOR THE UNION MINE SEPTAGE/LEACHATE TREATMENT FACILITY AND THE CLASS II LANDFILL AND SURFACE IMPOUNDMENT. THE SCHEDULE OF CHARGES FOR SERVICES AND THE BUDGET FOR BOTH SECTION 1 AND SECTION 2 TASKS ARE DETAILED IN EXHIBIT "B."

SECTION 1

LANDFILL GAS COMPLIANCE MONITORING AND DOCUMENTATION SCOPE OF WORK

Task 1 – Leachate Mound Pumping

FSI will use a portable submersible electric pumping system to periodically remove leachate from the newly installed gas well (EW-21) on the northwestern corner of the landfill. During the wet season, the leachate level in this well periodically rises above the top of the well screen and obstructs the flow of gas. FSI will pump down the mounded leachate as necessary during 2007 to restore gas flow from the well. Leachate removed from the well will be temporarily contained on FSI trucks and discharged into the Class II impoundment.

Task 2 – Monthly Well Head Monitoring

FSI will monitor the 23 landfill gas extraction wells for the permit-required parameters. FSI will confirm with Landfill personnel that the gas control systems are operational before mobilizing to the site to complete the routine monitoring task. Routine monitoring schedules will be provided upon request. Once per month, all of the landfill gas wells will be monitored for the following parameters using a Landtec GEM 2000 instrument. The instrument will be field calibrated before each use and factory-calibrated at the recommended 6-month intervals.

- Well head pressure (static)
- Methane concentration (percent)
- Carbon dioxide concentration (percent)
- Oxygen concentration (percent)
- Nitrogen concentration (percent)
- Landfill gas temperature (° Fahrenheit)

Monitoring results that meet the permit criteria will be logged as they are measured. Well heads not meeting the 37-2 criteria or other site specific requirements will be identified in the field and corrective action initiated. FSI will use tape, caulk, and/or tools to repair and tighten well heads where the oxygen or pressure are not within specifications. Vacuum to the well heads may also be increased. These wells will then be immediately retested and the data recorded. Well heads that can not be field repaired will be verbally reported to the designated representative within 24 hours. The monthly monitoring results will also be summarized in a spreadsheet and transmitted within one week of collection via electronic mail. Wells that can not be field-repaired as described above will be highlighted in the transmittal. FSI will also maintain a binder of landfill gas monitoring data at the septage plant offices. The binder will be updated each month. Please note that costs to complete re-monitoring of wells that are not within specification are excluded from this proposal. FSI will make every effort to complete re-monitoring in conjunction with other routine site tasks when this work is necessary. Please also note that labor and materials to complete well head or extraction system repairs (other than the minor field repair described above) is excluded from this proposal.

Task 3 – Quarterly Landfill Surface Monitoring

FSI will monitor the landfill surface for gas emissions using a GasTech GT Land Surveyor following the procedures described in the permit. Monitoring will be performed 3-5 inches above the landfill surface along 116 points following a serpentine grid pattern. Surface emission testing will be completed quarterly; measurements will be logged as they are collected. Any landfill surface exceedence will be verbally reported to a designated Landfill representative within 24 hours after the measurement is taken. Following corrective action performed by Landfill personnel, re-monitoring of areas where surface emission exceedences were recorded will be performed within the regulatory required time frames. Please note that costs to complete this re-monitoring are excluded from this proposal. FSI will make every effort to complete re-monitoring in conjunction with other routine site tasks when this work is necessary.

Task 4 – Quarterly Perimeter Probe Testing

FSI will monitor the nine perimeter probes once per quarter using the instrumentation described in Task 3. Testing will be performed in conjunction with a routine monthly well head monitoring event. Measurements will be logged as they are collected and compared to the five percent methane criteria enforced by the CIWMB. Measurements in excess of the CIWMB criteria will be verbally reported to a designated Landfill representative. Costs to retest perimeter probes with gas concentrations above the five percent criteria are excluded from this proposal.

Task 5 – Closure Construction Assistance

FSI will assist EDC in maintaining the LFG extraction and monitoring system while closure construction activities are being completed at the site. Services under this task will be provided as requested and/or approved by the EDC. Services which may be necessary could include disconnecting and reconnecting well heads from the vacuum source, adjust casing heights, reconfiguring wellhead testing ports, or other closure construction-related activities.

SCHEDULE AND BUDGET

FSI is prepared to initiate work on this project within two weeks after receiving your written authorization to proceed. We are prepared to complete the required activities at the frequencies described above. The verbal reporting of results not within regulatory limits or specifications will be performed to expedite initiation of corrective action. FSI will also maintain electronic and paper files of the monitoring data on behalf of EDC and update a site binder monthly. Instrument calibration records will be maintained and transmitted semiannually. FSI is proposing to execute the scope of work described consistent with the attached Schedule of Charges. The cost estimate to complete the work described for a period of 12 months (one year) is presented by task in Table 1. FSI will not exceed the total annual cost proposal provided without prior written authorization from EDC. Please note that the work scope and cost estimate for the project were developed using the following assumptions:

- Major component replacement or repair is excluded from this quotation. FSI will notify EDC when this replacement or repair is indicated. Operational adjustments to the abatement devices at the Landfill is also excluded. FSI assumes that Landfill operations personnel will execute the necessary adjustments when requested.
- Any work not specifically described in this proposal can be performed on a time and materials basis consistent with the attached Schedule of Charges. The hourly labor rate for the field testing work described in this proposal would be \$75. Additional work would include re-monitoring of wells or surfaces not meeting specifications, repair of leaking components, and component replacement.
- Analytical testing costs have not been included. FSI assumes that analytical testing will be contracted through EDC. Costs to resample specific monitoring points as a result of laboratory abnormalities (missed holding times, anomalous data, false positives) are not included.
- The project team will be provided with data collected by EDC personnel necessary to fulfill RWQCB reporting requirements.
- Costs to address changes to the Water Quality Protection Standard, or any responses to initial indications of potential release (including resampling to verify initial results) are excluded.
- Work not required by the existing orders is excluded from this proposal.
- Sampling of the septage influent or spray irrigation field effluent is excluded from this proposal. FSI understands that any required septage and spray irrigation field effluent sampling will be completed by EDC's septage plant operators.

SECTION 2

MONITORING AND REPORTING PROGRAMS R5-2006-0019 AND R5-2006-0020

SCOPE OF WORK

Field Solutions, Inc. (FSI) is proposing to execute the work in compliance with the requirements of Regional Water Quality Control Board, Central Valley Region (RWQCB) Monitoring and Reporting Program (MRP) Nos. R5-2006-0019 (Septage/Leachate Treatment Facility) and R5-2006-0020 (Class II Landfill and Surface Impoundment). The monitoring and reporting tasks that will be completed are summarized below.

Task 1 – Sampling

The MRPs include monitoring requirements for eight different media at the Union Mine Landfill. The media that will be sampled are:

- Leachate – Three monitoring points (LCRS sump, Class II impoundment, and the LCRS pipe) will be field tested monthly for pH and electrical conductivity. Grab samples for laboratory analysis will be collected annually for the required parameters.
- Groundwater – Nine existing monitoring wells will be sampled semiannually for the required parameters. The wells will be purged using the existing dedicated 2-inch Grundfos Rediflow pumps. FSI understands that the majority of the monitoring wells dewater during purging. Provisions will therefore be made to purge the wells on one day and sample the next. The four spray field monitoring wells will be sampled quarterly.
- Seep – Grab samples from one seep along the western side of Church Mine Road (downslope of the Class II surface impoundment) will be collected quarterly for the required laboratory analyses.
- Surface Water – Grab samples from four surface water monitoring points (Martinez Creek upstream and downstream, S-1, and S-2) will be collected for laboratory analyses. FSI will sample after the first significant storm of the rainy season and quarterly thereafter when water is present.
- Unsaturated Zone – Two vacuum lysimeters will be sampled quarterly/semiannually for the required parameters. The two pan lysimeters will be checked for liquids monthly during periods when the spray field is being operated. If liquid is detected, the pan lysimeters will be sampled monthly for the required laboratory parameters.

- Pendar Tunnel and Groundwater Drains – Grab samples from the Pendar Tunnel and the three groundwater drains will be collected within one month after flow begins and quarterly thereafter when water is present.
- Monthly Effluent Sampling – Grab samples will be obtained from a sample port on the wastewater effluent line (after chlorination) before the treated water is pumped to the spray fields. FSI understands that El Dorado County (EDC) staff are collecting the required monthly influent samples, weekly effluent samples, and field data.
- Annual Spray Field Surficial Soil Sampling – Four discrete soil samples will be collected from the ground surface at each spray field annually during October. The laboratory will be instructed to composite the discrete samples per spray field and analyze the composite samples for specific conductance.

Please note dissolved metal testing is required for samples from most of these media. Samples for dissolved metal analyses will be filtered in the field using high volume 0.45-micron filters. Each filter will be used once and discarded. Requisite field quality control samples (duplicates, field blanks, trip blanks) will be included in the monitoring program. Field data sheets will be completed for each sample collected. All samples collected will be immediately labeled, placed in a cooler, and kept cool using ice. Chain-of-custody forms will be completed and accompany the samples to EDC's designated contract laboratory, currently CLS Labs in Rancho Cordova, California.

Task 2 – Reporting

Monitoring & Reporting Program No R5-2006-0020 for the UMDS requires two semiannual reports and one annual summary report each year. The Spring semiannual report is due by July 31 and covers the period January 1 – June 30. The Fall report is due by January 31 and covers the period July 1 – December 31 of the previous calendar year. The Fall report also incorporates the Annual Summary Report, summarizing all data collected over the entire calendar year.

The format and information required for these reports are described in Order No. R5-2006-0020. The following information is required for all reports and is included in this proposal:

- Raw data (laboratory reports), including method detection limits and practical quantitation limits, for all analyses performed during the reporting period
- Tabular summary of all data for the reporting period
- Summary and discussion of monitoring results, including any violations
- Tabular and graphical summaries of all monitoring data for the previous year (Fall report only)
- Summary and certification of completion of all Standard Observations for the Landfill, the perimeter, and the receiving waters

- Quantity of liquid pumped from the Class II surface impoundment LCRS
- Data from annual testing of all LCRSs, including comparison with previous tests
- Water table contour maps, showing groundwater gradient and direction, for dry and wet seasons (high and low water table elevations)
- Evaluations of impacts to surface water quality, groundwater quality, and the unsaturated zone, and compliance with the Water Quality Protection Standards for each medium
- Pendar Tunnel and groundwater drain results and evaluation of potential impacts to Martinez Creek.

Monitoring data not collected by FSI (e.g. landfill Standard Observations, Class II surface impoundment pumping data) will be provided by EDC staff for inclusion in the monitoring report. A draft technical summary and compliance evaluation will be prepared for each monitoring report and provided to EDC for review. EDC comments will be addressed in the final monitoring reports. Up to three copies of the final reports will be prepared for distribution to the required recipients.

Order No. R5-2006-0019 requires the submittal of monthly, quarterly, and annual monitoring reports. This proposal includes preparation of the fourth quarter 2006 and annual monitoring report due by February 1, 2006. FSI understands EDC will be preparing all of the other required monitoring reports for 2007.

Task 3 – Database Management

FSI in association with Tim D. Bray will manage and update the environmental data management system for the site. This system has the following capabilities:

- Import data electronically from laboratory electronic data deliverables (EDDs)
- Error-detection routines to identify potential laboratory errors
- Generate all required tables and graphs for landfill self-monitoring reports
- Produce other report graphics, such as groundwater contour maps, and/or export the data to other programs for graphics production
- Export data for statistical analysis as needed.

The primary function of this system will be to support and facilitate the generation and production of the semiannual Landfill Self-Monitoring Reports. A secondary function will be to

facilitate data extraction and evaluation as needed for other projects or contingencies, such as responding to regulatory agency requests or tentative indications of release.

The UMDS database will be installed and maintained by Tim D. Bray at his office. EDC may elect to purchase an additional site license for installation of a duplicate copy of the data management system at the EDC office. Copies of the updated database will be provided to EDC each time new data are added.

Tim D. Bray will assume responsibility for managing and maintaining the database of water quality data for UMDS. The database will be updated at least once per month as new data are generated by the Monitoring & Reporting Programs. Each time new data are added, a copy of the entire database will be created. In addition, Mr. Bray will perform routine backups and system maintenance as needed to assure integrity and availability of the system and the data. Software upgrades will be installed as needed and as available.

On January 1, 2005, the State Water Board adopted regulations that require electronic submittal of information (ESI) for soil and groundwater data required by Land Disposal programs. Information required to be submitted includes laboratory analytical reports as well as compliance monitoring reports. Electronic submission may replace paper reports, although currently both are required. The State database system is called GeoTracker.

In order to comply with these regulations, UMDS has been registered as a site in the GeoTracker database, and Tim D. Bray has been designated as a Responsible Party for submittal of data and reports. Please note that field survey data in a format acceptable for Geotracker uploads is required for all of the R5-2006-0020 monitoring points. The survey data that EDC recently provided to Tim D. Bray will be reviewed to determine if any additional data are necessary. Once all necessary survey data has been provided by EDC and accepted by the State system, data will be uploaded after it has been verified and reviewed. At this time the system only requires submission of data generated after January 1, 2005. FSI has included budget for two uploads to the State system during 2007.

EXHIBIT "B"

SCHEDULE OF CHARGES



SCHEDULE OF CHARGES

Personnel Charges

	<u>Rate Per Hour</u>
Project Manager	110 – 125
Senior Project Scientist/Industrial Hygienist	95 – 110
Staff Scientist	75 – 95
Remediation System Operator	65 – 85
Technician/ Project Assistant	50 – 75
Office Services	30 – 60

Travel time will be charged in accordance with the above rates, up to a maximum of 8 hours per day. A detailed invoices(s) **must** be attached for payment.

Direct Charges

Field Filters	\$20 each
Vehicle mileage	Payment(s) shall be in accordance with current Federal mileage rates.
GasTech GT Land Surveyor	\$100 per day
Landtec GEM-200 Gas Analyzer	\$200 per day

A detailed invoices(s) **must** be attached for payment.

OUTSIDE SERVICES

Charges for special outside services, equipment and facilities not furnished directly by Field Solutions, Inc. will be billed at cost plus 5 percent. Such charges may include, but shall not be limited to, the following services: A detailed invoices(s) **must** be attached for payment.

- Subconsultants/Subcontractors
- Special fees, permits, insurance, etc.
- Shipping charges
- Consumable materials
- Printing and reproduction
- Rented field equipment

Table 1
2007 Landfill Gas and Groundwater Compliance Monitoring Services
Union Mine Disposal Site
Landfill and Septage/Leachate Treatment Facility

Activity	2007 Annual Cost Estimate (12 Months)
Landfill Gas Compliance Monitoring ¹	
Leachate Mound Pumping	\$ 1,500
Monthly Well Head Monitoring	16,200
Quarterly Landfill Surface Monitoring	3,800
Quarterly Perimeter Probe Testing	2,000
Closure Construction Assistance	5,000
TOTAL	\$ 28,500
Landfill WDR R5-2006-0020 Monitoring and Reporting ²	
Sampling	\$ 14,500
Reporting	15,900
Database Management ³	17,100
TOTAL	\$ 47,500
Septage WDR R5-2006-0019 Monitoring and Reporting ⁴	
Sampling	\$8,000
Annual Reporting	5,000
TOTAL	\$ 13,000
TOTAL ESTIMATED COSTS FOR 2007	\$ 89,000

Table 1
2007 Landfill Gas and Groundwater Compliance Monitoring Services
Union Mine Disposal Site
Landfill and Septage/Leachate Treatment Facility
(Continued)

1. Field Solutions is currently performing landfill gas compliance monitoring services under El Dorado County Agreement No. 023-A-05/06-11. The cost estimate assumes that services will be extended from January 1 to December 31, 2007 with no changes to the scope described in the current agreement.
2. Testing of treated effluent to satisfy EID's disposal requirements is not included in the landfill monitoring and reporting program cost estimate.
3. The database management task includes monthly database updates, a geotracker compliance evaluation, and two geotracker uploads during 2007.
4. The septage monitoring and reporting program assumes that El Dorado County staff will collect the required monthly influent and weekly effluent samples and prepare the monthly and quarterly data reports.