

AGREEMENT TO FURNISH HYDROGEOLOGICAL SUPPORT,
TECHNICAL ANALYSIS AND REPORTING SERVICES
FOR THE CALIFORNIA STREET LANDFILL

This Agreement is made and entered into this 16th day of December 2003, by and between the City of Redlands, a municipal corporation (hereinafter "City") and 3DGeoServices., hereinafter ("Consultant").

In consideration of the mutual promises, covenants and conditions hereinafter set forth, City and Consultant hereby agree as follows:

ARTICLE 1 - ENGAGEMENT OF CONSULTANT

- 1.1 City hereby engages Consultant, and Consultant hereby accepts the engagement, to perform professional consulting services ("Services") for environmental review pertaining to the acquisition of land adjacent to the City's California Street Landfill ("Project").
- 1.2 The Services shall be performed by Consultant in a professional manner, and Consultant represents that it has the skill and the professional expertise necessary to provide high quality Services for the Project at the level of competency presently maintained by other practicing professional engineers in the industry providing like and similar types of services.

ARTICLE 2 - SERVICES OF CONSULTANT

- 2.1 The specific Services which Consultant shall perform are more particularly described in Attachment "A," entitled "Scope of Services," which is attached hereto and incorporated herein by this reference.
- 2.2 Consultant shall comply with all applicable Federal, State and local rules, laws and regulations in the performance of this Agreement including, but not limited to, all applicable Labor Code and prevailing wage laws.

ARTICLE 3 - RESPONSIBILITIES OF CITY

- 3.1 City shall make available to Consultant information in its possession that is pertinent to the performance of Consultant's Services.
- 3.2 City will provide access to and make provisions for Consultant to enter upon City-owned property or right-of-way as required by Consultant to perform the Services.
- 3.3 City designates Gary Van Dorst, Project Manager, to act as its representative with respect to the Services to be performed under this Agreement.

ARTICLE 4 - PERIOD OF SERVICE

- 4.1 Consultant shall perform the Services in a prompt and diligent manner and in accordance with the schedule set forth in Attachment "B", entitled "Project Schedule".

ARTICLE 5 - PAYMENTS TO THE CONSULTANT AND NOTICE

- 5.1 The total compensation for Consultant's performance of the Services shall not exceed the amount of \$58,400. City shall pay Consultant on a time and materials basis up to the not to exceed amount, in accordance with Attachment "C", entitled "Project Costs" based on the hourly rates shown in Attachment "D", entitled "Fee Schedule".
- 5.2 Consultant shall bill City within ten days following the close of each month by submitting an invoice indicating the Services performed, who performed the Services, indirect costs, and the detailed cost of all Services including backup documentation. Payments by City to Consultant shall be made within 30 days after receipt and approval of Consultant's invoice, by warrant payable to Consultant.
- 5.3 All contractual notices, bills and payments shall be made in writing and may be given by personal delivery or by mail. Notices, bills and payments sent by mail shall be addressed as follows:

City

Gary Van Dorst
Solid Waste Division
35 Cajon Street
P. O. Box 3005
Redlands, CA 92373

Consultant

Mercedes A. Murillo, C.E.G.
3D GeoServices, Inc.
26042 Mirage Court
Moreno Valley, CA 92555

When so addressed, such notices shall be deemed given upon deposit in the United States Mail. In all other instances, notices, bill and payments shall be deemed given at the time of actual delivery. Changes may be made in the names and addresses of the person to whom notices, bills, and payments are to be given by giving notice pursuant to this paragraph.

ARTICLE 6 - INSURANCE AND INDEMNIFICATION

6.1 Consultant's Insurance to be Primary

All insurance required by this Agreement is to be maintained by Consultant for the duration of this Project and shall be primary with respect to City and non-contributing to any insurance or self-insurance maintained by the City. Consultant shall not perform any services pursuant to this Agreement unless and until all required insurance listed below is obtained by Consultant. Consultant shall provided City with Certificates of Insurance and

endorsements evidencing such insurance prior to commencement of work. All insurance policies shall include a provision prohibiting cancellation of the policy except upon thirty (30) days prior written notice to City.

6.2 Workers' Compensation and Employer's Liability

- A. Consultant shall secure and maintain Worker Compensation and Employer's Liability insurance throughout the duration of this Agreement in amounts which meet statutory requirements with an insurance carrier acceptable to the City.
- B. Consultant expressly waives all rights to subrogation against the City, its officers, employees and volunteers for losses arising from work performed by Consultant for City by expressly waiving Consultant's immunity for injuries to Consultant's employees and agrees that the obligation to indemnify, defend and hold harmless provided for in this Agreement extends to any claim brought by or on behalf of any employee of Consultant. This waiver is mutually negotiated by the parties. This shall not apply to any damage resulting from the sole negligence of City, its agents and employees. To the extent any of the damages referenced herein were caused by or resulted from the concurrent negligence of City, its agents or employees, the obligations provided herein to indemnify, defend and hold harmless is valid and enforceable only to the extent of the negligence of Consultant, its officers, agents and employees.

6.3 Comprehensive General Liability Insurance. Consultant shall secure and maintain in force throughout the duration of the Agreement comprehensive general liability insurance with carriers acceptable to City. Minimum coverage of one million dollars (\$1,000,000) per occurrence and two million dollars (\$2,000,000) aggregate for public liability, property damage and personal injury is required. Consultant shall obtain an endorsement that City shall be named as an additional insured.

6.4 Professional Liability Insurance. Consultant shall secure and maintain professional liability insurance throughout the duration of this Agreement in the amount of one million dollars (\$1,000,000) per occurrence made.

6.5 Business Auto Liability Insurance. Consultant shall have business auto liability coverage, with minimum limits of one million (\$1,000,000) per occurrence, combined single limit for bodily injury liability and property damage liability. This coverage shall include all consultant owned vehicles used on the project, hired and non-owned vehicles, and employee non-ownership vehicles. Consultant shall obtain an endorsement that the City shall be named as an additional insured.

6.6 Assignment and Insurance Requirements. Consultant is expressly prohibited from subletting or assigning any of the services covered by this Agreement without the express written

consent of City. In the event of mutual agreement between parties to sublet a portion of the Services, the Consultant will add the subcontractor as an additional insured and provide the City with the insurance endorsements prior to any work being performed by the subcontractor. Assignment does not include printing or other customary reimbursable expenses that may be provided in this Agreement.

- 6.7 Hold Harmless and Indemnification. Consultant shall defend, indemnify, and hold harmless City and its elected officials, employees and agents from and against any and all actions, claims, demands, lawsuits, losses and liability for damages to persons or property, including costs and attorney fees, that may be asserted or claimed by any person, firm, entity, corporation, political subdivision or other organization arising out of or in connection with Consultant's negligent and/or intentionally wrongful acts or omissions under this Agreement; but excluding such actions, claims, demands, lawsuits and liability for damages to persons or property arising from the sole negligence or intentionally wrongful acts of City, its officers, employees or agents.

ARTICLE 7 - GENERAL CONSIDERATIONS

- 7.1 In the event any action is commenced to enforce or interpret any of the terms or conditions of this Agreement the prevailing party shall, in addition to any costs and other relief, be entitled to the recovery of its reasonable attorneys' fees.
- 7.2 Consultant shall not assign any of the Services required by this Agreement, except with the prior written approval of City and in strict compliance with the terms, provisions and conditions of this Agreement.
- 7.3 Consultant's key personnel for the Project are:
- Project Manager: Mercedes Murillo
- Consultant agrees that the key personnel shall be made available and assigned to the Project, and that they shall not be replaced without concurrence from City.
- 7.4 All documents, records, drawings, designs, costs estimates, electronic data files and databases and other documents developed by the Consultant pursuant to this Agreement and any copyright interest in said above described documents, shall become the property of City and shall be delivered to City upon completion of the Services, or upon the request of City. Any reuse of such documents and any use of incomplete documents will be at City's sole risk.
- 7.5 Consultant is for all purposes an independent contractor. All personnel employed by Consultant are for its account only, and in no event shall Consultant or any personnel retained by it be deemed to have been employed by City or engaged by City for the account

of or on behalf of City.

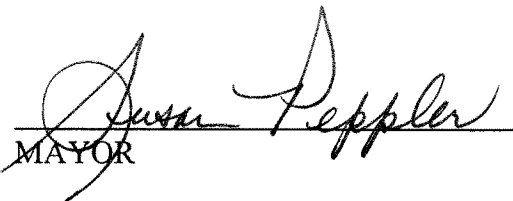
- 7.6 Unless earlier terminated, as provided for below, this Agreement shall terminate upon completion and acceptance by City of the Services.
- 7.7 This Agreement may be terminated by the City, without cause, by providing ten (10) days prior written notice to the Consultant (delivered by certified mail, return receipt requested) of intent to terminate.
- 7.8 Upon receipt of a termination notice, Consultant shall (1) promptly discontinue all services, and (2) deliver or otherwise make available to City, copies of any data, design calculations, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by Consultant in performing the Services required by this Agreement. Consultant shall be compensated on a pro-rata basis for work completed up until notice of termination.
- 7.9 This Agreement, including the attachments incorporated herein by reference, represents the entire agreement and understanding between the parties and any prior negotiations, proposals or oral agreements are superseded by this written Agreement. Any amendment to this Agreement, to be effective, shall be in writing and approved by the City Council of City and signed by City and Consultant.
- 7.10 This Agreement shall be governed by and construed in accordance with the laws of the State of California.

IN WITNESS WHEREOF, duly authorized representatives of the City and Consultant have signed in confirmation of this Agreement.


City of Redlands
("City")

3D GeoServices, Inc.
("Consultant")

By:


MAYOR

By:


Mercedes A. Murillo, C.E.G.
President

ATTEST:


City Clerk, City of Redlands

**2003-2004 HYDROGEOLOGIC SUPPORT, TECHNICAL ANALYSIS, AND
REPORTING SERVICES**

ATTACHMENT A

SCOPE OF WORK

Attachment A - Scope of Work

3D GeoServices understands that this agreement is for the period October 1, 2003 through July 31, 2005, to commence upon authorization from the City of Redlands (City). The agreement will require submittal of often scheduled monitoring reports, including seven quarterly and two scheduled annual water quality monitoring reports and one leachate monitoring report to the Santa Ana Regional Water Quality Control Board (SARWQCB), as well as a number of technical reports related to monitoring well and production well decommissioning. All supporting witnessing, supervision, analyses, documentation, and liaison as needed and described herein will be provided. 3D GeoServices will follow an established format to provide consistency to the City's program and ease SARWQCB review of the reports. This attachment describes the agreement scope of work for the California Street Landfill (CSL) groundwater monitoring program.

Monitoring Support - 3D GeoServices understands that the City personnel collect the required samples from the designated sampling locations and samples are submitted to Babcock Laboratory for analysis. Monitoring support consists of tasks 1.1 through 1.8, (quarterly groundwater monitoring reports for the fourth quarter of 2003 through the second quarter of 2005), tasks 2.1 and 2.2 (annual 2003 and 2004 monitoring reports), tasks 3.1 and 3.2 (annual leachate sampling and reporting in 2004-5), and task 4 (database maintenance for revised monitoring system statistical analyses).

Tasks 1.1 - 1.8, Quarterly Groundwater Monitoring Reports - During all monitoring reporting periods, 3D GeoServices will review field notes and laboratory data in a timely fashion so that data review is completed quickly and any required SARWQCB notification meets the deadlines established in Orders 81-172 and 98-99-06. The data review will include:

- Providing technical and regulatory expertise to City staff
- Review of all field notes to verify that proper sampling techniques were utilized
- A thorough data quality check to verify that holding times, required analyses, reporting limits and laboratory precision requirements have been met
- Updating water level and groundwater quality data bases
- Performance of a thorough quality control check on all data to verify that only correct information is input into the data bases.

All sample analyses will be checked against sample collection dates to verify that holding times were met. Analytical results will also be checked to verify that all required analyses have been performed and that laboratory quality assurance results were within acceptable limits. Any identified problems will be detailed in the quarterly reports.

The procedure for laboratory data entry includes manual transfer of data into the existing data base. Water level information and field data will also be manually input. All data entered

Attachment A - Scope of Work

into the data base will be checked to ensure that the data base is accurate. Laboratory reporting limits, BPOs, and maximum concentration levels will be highlighted with bold font so that the reader can easily discern potential problems.

Statistical analysis of the water quality data will be performed by 3D GeoServices. In addition to the statistical analysis of metals surrogates and selected general minerals, selected volatile organic compounds detected at the landfill since September of 1998 will be statistically analyzed to establish "concentration limits equal to background concentrations" during this portion of an extended evaluation monitoring period. VOC statistical analyses will be performed as data quantity and quality permit for each compound of concern, on a per-well basis, using intra-well methods as well as background-to-compliance comparisons. Charts and tables will be used to illustrate VOC statistical findings.

The quarterly groundwater monitoring reports will include the following information:

- A transmittal letter containing an abbreviated summary, including discussions on violations and any actions taken or planned
- An executive summary of current monitoring results
- A discussion of groundwater occurrence and movement, including hydrographs for each well, a groundwater elevation contour map, and groundwater gradient calculation
- A discussion of groundwater quality, including field and laboratory methods, statistical methodology and results, tabulated analytical results, copies of laboratory reports and chain of custody forms, copies of field forms, and graphs of constituents detected at concentrations exceeding intra-well statistical variances.
- Sludge chemical analyses
- Conclusions, and as needed, recommendations.

Tasks 2.1 and 2.2, Annual Groundwater Monitoring Reports - Two annual groundwater monitoring reports will be prepared in combination with the first quarter (Winter) 2003 and 2004 quarterly reports. In addition to the requirements listed in Task 1, the following items will be included in the annual reports:

- Groundwater monitoring well data summaries, including tabular and graphical summaries of groundwater levels and sampling results for all annual data, graphical presentation of groundwater constituents that equaled or exceeded BPOs or maximum concentration levels during any quarter of the monitoring period, and summary tables of vadose zone sample results.

Attachment A - Scope of Work

- An annual summary, discussion and recommendations regarding the detection of VOCs, and any statistical background concentration limits for VOCs which were analyzed within the constraints of available data quality and quantity.
- A discussion of groundwater quality at the CSL, a discussion of vadose zone quality and potential impacts to groundwater quality, and updated information relating to the groundwater monitoring system and hydrogeology of the CSL.

Tasks 3.1 and 3.2, Leachate Sampling and Reporting - As required in the permit, upon the completion of the leachate collection and removal system and refuse disposal in the first expansion cell, a sample of the leachate will be collected and analyzed for all EPA Appendix II constituents in October of 2004. The results of this analysis will be submitted in a report to the SARWQCB by January 31, 2005.

Task 4, Database Management - Beginning the first quarter of 2004, and periodically as needed, the existing database will be reviewed and edited such that only data relevant to the current groundwater movement, quality and hydrogeologic character is included for statistical analysis. If necessary, a separate database will be updated as needed for historical trend.

Landfill Expansion Support - 3D GeoServices will provide continued technical support for the horizontal landfill expansion by providing documentation and certification for the decommissioning of monitoring wells B-5A, B-5B, and the Williams-Daniel production well.

This task also includes project management, field support and all required witnessing, supervision, documentation, and reporting for the decommissioning of the monitoring wells and production well.

Other Tasks - 3D GeoServices will provide the City with general consulting services to include all miscellaneous requests and technical support for all unforeseeable events related to groundwater and surface water quality and protection at the CSL.

In order to meet the City's needs, and at the City's request, 3D GeoServices personnel will answer any questions or issues the City, regulators, or general public may have regarding groundwater and vadose zone quality at the landfill. The project team may identify modifications that could improve the monitoring program for the City while minimizing costs; written justification and possible presentations would be needed prior to obtaining regulatory approval for changes in the program.

Deliverables - Deliverables will consist of memorandums, letter reports, text and faxed information to be provided to City staff on a time and materials basis upon request. One draft copy of each technical report will be submitted to the City's Solid Waste Manager for review. After

Attachment A - Scope of Work

incorporation of the City's comments, four (4) bound copies of the final reports and one digital report file will be submitted for the City's use and distribution. In the case of the quarterly and annual groundwater monitoring reports, six bound complete hard copies, two stapled hard copies of the executive summary, and one copy of the final report digital file will be submitted to the City for each of the Quarterly and Annual Reports. All field work will be personally attended and witnessed first hand by a geologist currently registered in the State of California, who will then certify all technical reports resulting from the work performed.

Attachment B - Project Schedule

HYDROGEOLOGIC SUPPORT, TECHNICAL ANALYSIS, AND REPORTING SERVICES

ATTACHMENT B

PROJECT SCHEDULE

The project consists of tasks which are to be completed during the period extending from October 1, 2003 to July 31, 2005. Individual deadlines for the tasks described herein are to be determined in accordance to the City's needs, and will be determined by the City, and agreed and committed to by 3D GeoServices, Incorporated during the course of the contract period. This statement summarizes the schedule proposed by 3D GeoServices, Incorporated for this project.

Attachment C - Project Fee

**HYDROGEOLOGIC SUPPORT, TECHNICAL ANALYSIS, AND REPORTING
SERVICES**

ATTACHMENT C

PROJECT FEE

Attachment C
2003-2004 Hydrogeologic Analysis and Reporting Services Fee Schedule
California Street Landfill

Task Description	Lump Sum Cost	Total Costs
Monitoring Support		
Task 1.1 Q3-03. Q3-2003 GWM Report	\$ 1,000	\$ 1,000
Task 1.2 Q4-03. Q4-2003 GWM Report	\$ 3,600	\$ 3,600
Task 1.3 Q1-04. Q1-2004 GWM Report (COC Study)	\$ 4,600	\$ 4,600
Task 1.4 Q2-04. Q2-2004 GWM Report	\$ 3,800	\$ 3,800
Task 1.5 Q3-04. Q3-2004 GWM Report	\$ 3,800	\$ 3,800
Task 1.6 Q4-04. Q4-2004 GWM Report	\$ 3,800	\$ 3,800
Task 1.7 Q1-05. Q1-2005 GWM Report	\$ 3,800	\$ 3,800
Task 1.8 Q2-05. Q2-2005 GWM Report	\$ 3,800	\$ 3,800
<i>Subtotal Task 1: Quarterly GWM Reports</i>	\$ 28,200	\$ 28,200
Task 2.1 Annual 2003 GWM Report	\$ 4,300	\$ 4,300
Task 2.2 Annual 2004 GWM Report	\$ 4,300	\$ 4,300
<i>Subtotal Task 2: Annual GWM Reports</i>	\$ 8,600	\$ 8,600
Task 3.1 Leachate Sampling (Oct 2004, Apr 2005)	\$ 800	\$ 800
Task 3.2 Leachate Report (Jan 2005)	\$ 1,000	\$ 1,000
<i>Subtotal Task 3: Leachate Sampling</i>	\$ 1,800	\$ 1,800
Task 4 - Database Maintenance	\$ 3,800	\$ 3,800
<i>Subtotal Task 4: Database Management</i>	\$ 3,800	\$ 3,800
Landfill Expansion Support		
Task 5.1 Decommissioning Certification (W-D Well)	\$ 3,000	\$ 3,000
Task 5.2 Decommissioning Certification (5A, 5B)	\$ 3,000	\$ 3,000
<i>Subtotal Task 5: Landfill Expansion Support</i>	\$ 6,000	\$ 6,000
Other Tasks	\$ 10,000	\$ 10,000
Total	\$ 58,400	\$ 58,400

Attachment D - Rate Schedule

**HYDROGEOLOGIC SUPPORT, TECHNICAL ANALYSIS, AND REPORTING
SERVICES**

ATTACHMENT D

RATE SCHEDULE

Attachment D - Rate Schedule

Attachment D 2003-2004 Hydrogeologic Support, Technical Analysis, and Reporting Services Rate Schedule	
Item	Rate
Professional Personnel (P.E., C.E.G., C.H.G., includes computer charges)	\$100.00 per hour
Subcontracted Professional Services, Supplies	Cost plus 18%