

AMENDMENT NO. 2
TO AGREEMENT DATED OCTOBER 18, 1995,
BETWEEN THE CITY OF REDLANDS AND
3DGEOSERVICES, INC.

TASK ORDER 7

REGULATORY COMPLIANCE SERVICES

This amendment authorizes the Consultant to perform services as defined in Attachment 1 - Task 7, in accordance with the Agreement dated October 18, 1995, for regulatory compliance services in connection with the California Street Landfill.

This Amendment makes the following changes to the Agreement; all other provisions of the Agreement remain in effect.

Section 1. Engagement of Consultant

The Scope of Tasks is amended to include Attachment 1, which defines the scope of work for regulatory compliance services associated with the California Street Landfill.

Section 2. Responsibilities of the City

No Changes.

Section 3. Period of Service

The time period for performance of the Consultant's services under this Amendment is set forth in Attachment 1.

Section 4. Payments to Consultant

The total compensation to perform work under this Amendment shall be in accordance with Attachment 1.

Section 5. Insurance and Indemnification

No Changes.

Section 6. Attorneys' Fees

No Changes.

Section 7. Assignment

No Changes.

Section 8. Drawings and Records

No Changes.

Section 9. Independent Contractor

No Changes.

Section 10. Termination

No Changes.

Section 11. Books and Accounts

No Changes.

Section 12. Entire Agreement

This Amendment No. 2 constitutes a revision to the Agreement, when signed by the parties hereto.

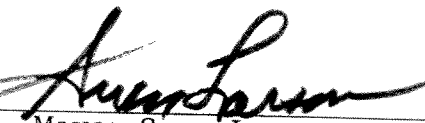
Section 13. Governing Law

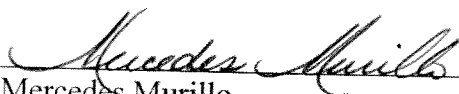
No Changes.

IN WITNESS WHEREOF, duly authorized representatives of the parties have signed in confirmation of this Amendment.

CITY OF REDLANDS

3D GEOSERVICES, INC.

By: 
Mayor Swen Larson

By: 
Mercedes Murillo,
President

ATTEST:


City Clerk, City of Redlands



March 11, 1996

Ms. Valorie Shatynski
Solid Waste Manager
Municipal Utilities Department
City of Redlands
P.O. Box 3005
Redlands, CA 92373

Dear Ms. Shatynski:

3D GeoServices is pleased to submit this letter proposal to conduct the following services for the California Street Landfill (CSL). These services may be attached to our existing Agreement dated October 18, 1995 (hereinafter referred to as RDL95-2) as "Task 7", and shall be conducted on a schedule in accordance with the needs of the City of Redlands as defined below.

Task 7.1 Hydrogeologic & Regulatory Services for Evaluation Monitoring

Task 7.1 will consist of hydrogeologic support, data analysis, and reporting associated with groundwater evaluation monitoring. Such support will include regulatory agency liaison and consulting to provide an understanding of regional and local groundwater issues related to conditions at the CSL. Task 7.1 will also consist of evaluating chemical and physical groundwater monitoring data on a quarterly basis, and the preparation of the first and second quarter 1996 groundwater monitoring reports suitable for submittal to the Regional Water Quality Control Board, Santa Ana Region (RWQCB). The quarterly reporting and statistical analysis is proposed to be subcontracted to Camp, Dresser & McKee, Inc. of Ontario, California (CDM), based on RWQCB-approved methods contained in statistical programs provided by CDM, for consistency over the critical evaluation monitoring period. The raw monitoring data will be received from the City on copies of the original laboratory data sheets, with attendant QA/QC data and chain of custody documentation. This information will then be organized and input into a database, analyzed and reported in the proposed format outlined in Attachment A of this letter proposal.

Task 7.1 Deliverables

Task 7.1 deliverables will consist of two final quarterly reports to the RWQCB, supported by memorandums, letter reports, text and faxed information to be provided to City staff as requested. One draft copy of each quarterly report will be submitted within two and one-half weeks after the raw groundwater monitoring data has been received from the City, and one final report in unbound form will be submitted within two weeks of receipt of comments on the draft report by City staff. The ability to provide the final report in time to meet the regulatory deadlines for submittal to the

RWQCB will depend on the City's provision of raw data and draft report review comments. The reports will be certified by a geologist registered in the State of California, and will contain necessary elements as specified in Title 23 of the California Code of Regulations, in a format consistent with the outline contained in Attachment A of this letter proposal.

Task 7.2 Resource Analysis

Task 7.2 will consist of providing additions to the Landfill Resource Evaluation as requested by the City. Additions will be made to economic spreadsheets, including budgetary information to facilitate decision-making and budgetary planning for solid waste services. Two meetings to be held at the City's offices are included. Task 7.2 will also include economic, regulatory and environmental support and advisement for the City's solid waste budget planning for FY 1997.

Task 7.2 Deliverables

Task 7.2 deliverables will consist of interactive spreadsheets in digital form, as well as hard-copy print-outs of various spreadsheet views and economic scenarios as directed by the City. These documents will be in the form of summary text, tables and balance sheets, bar charts, and line charts, as requested by the City.

Task 7.3 Regulatory Compliance Assistance

Task 7.3 will consist of information gathering, scheduling, budgeting, documentation, and attendance at meetings and teleconferences related to the immediate permit concerns at the CSL. These concerns include permit requirements for erosion control and protection, groundwater sampling, landfill gas/condensate control, air quality monitoring, flood control revetment repairs, and other miscellaneous items.

Task 7.3 Deliverables

Deliverables for Task 7.3 will be in the form of internal memorandums, telephone logs, draft schedules and cost estimates, and notes from meetings. These items will be delivered to the City as they are developed, and will be used as either documentation of communications, or "work-in-progress" notes to be used in future planning, scheduling and reporting.

Task 7 Cost Estimate

Lump sum \$30,650 (Not to Exceed).

The above lump sum includes all hourly rates, plus other direct and indirect costs associated with the task descriptions described in this letter proposal, for a schedule to be determined by the City.

Task 7.1	Hydrogeologic & Regulatory Services for Evaluation Monitoring	\$16,250
Task 7.2	Resource Analysis	\$11,200
Task 7.3	Regulatory Compliance Assistance	\$ 3,200
Total Estimate Cost, Task 7		\$30,650

A detailed cost estimate for the this proposal is contained on Attachment B of this letter proposal, and all work will be provided on a schedule to be determined by the City. It has always been our pleasure to serve the City's environmental needs. Please do not hesitate to contact me at (818) 794-1901, should you have any questions or requests regarding this proposal.

Sincerely,
3D GeoServices, Inc.



Mercedes A. Murillo
President

ATTACHMENT A

OUTLINE OF PROPOSED QUARTERLY REPORT TO THE REGIONAL WATER QUALITY CONTROL BOARD

Section 1.0 Site Background

- Description of waste management units. Note whether the waste management units have liners, subdrains, or a gas control system. Include site map.
- Description of wastes landfilled.
- Description of geology of the site. Special emphasis on stratigraphy as it relates to attenuation in the vadose zone, perched groundwater, and regional groundwater flow.

Section 2.0 Configuration of the Water Table

- One contour map depicting the elevation of the water table (maps to include location of monitoring wells and lysimeters). Update well hydrographs (based on those in 1995 annual report).
- Estimate groundwater flow direction and velocity, incorporating most recent data.

Section 3.0 Groundwater Quality (assuming a non-historical analysis is being performed)

- Compile analytical data for the quarter on an Excel database. Includes some quality control time to make sure that the data are accurate in light of the original lab reports.
- Make the statistical analysis of the quarterly data (non-historical analysis). Identify wells and analytes that are significantly different from background, and assess the likelihood that they are an indication of a release. Identify the cases where resampling was performed, and discuss the implications of the resampling data.
- Conclude by assessing (qualitatively) the overall likelihood of a release during the quarter, and by identifying changes that might be needed in the next monitoring period (e.g., number of samples collected, protocol for collection and analysis of the samples, resampling protocol).

Section 4.0 Vadose Zone Monitoring.

- Indicate the location of the monitoring points, on a map or in cross sections.
- Compile the analytical data for the quarter.

- Conclude by assessing the overall likelihood (qualitatively) that a release to the vadose zone could impact groundwater quality. Identify changes that might be needed in the next monitoring period.

Section 5.0 Certification

- Certify that the data included in the report are reported in full, and are an accurate rendition of the data reported by the analytical laboratory or the sampling crew.

TABLES

1. Water level measurements (historical database)
2. Groundwater chemistry (quarter data)
3. Vadose zone chemistry (quarter data)
4. Leachate chemistry (quarter data)

FIGURES

1. Site map
2. One site map with contoured water table elevations
3. One hydrograph for each monitoring well (historical database)
4. Site map with location of groundwater and vadose zone monitoring points
5. Groundwater quality graphs as determined necessary from analysis (optional)

APPENDICES

- A. Original laboratory reports (quarter)
- B. Calculation sheets or printouts of the statistical analysis

ATTACHMENT B **PROPOSED TASK 7 COST ESTIMATE**

California Street Landfill Proposed Hydrogeologic, Regulatory & Economic Support Services Cost Estimate (FY 1996)								
Task Description	Principal Geologist (\$80/hour)		Principal Engineer (\$80/hour)		Sub-Consultant	Other	Hours	Costs
	Hours	Costs	Hours	Costs	Costs (CDM)	Direct Costs	Per Task	Per Task
Task 7.1: Hgeo & Regulatory Services for Evaluation Monitoring								
Hydrogeologic Consultation, Regulatory Agency Liaison & Support	64	\$5,120	0	\$0	\$0	\$0	64	\$5,120
First & Second Quarter 1996 Groundwater Monitoring Reports	24	\$1,920	0	\$0	\$9,210	\$0	24	\$11,130
Subtotal Task 7.1	88	\$7,040	0	\$0	\$9,210	\$0	88	\$16,250
Task 7.2 Resource Analysis								
Additions to Landfill Resource Evaluation	0	\$0	84	\$6,720			84	\$6,720
Landfill Expansion Spreadsheet Summaries and Charts	24	\$1,920	0	\$0			24	\$1,920
Advisement for FY 1997 Budget	32	\$2,560	0	\$0			32	\$2,560
Subtotal Task 7.2	56	\$4,480	84	\$6,720	\$0	\$0	140	\$11,200
Task 7.3 Regulatory Compliance Assistance								
	40	\$3,200	0	\$0			40	\$3,200
Subtotal Task 7.3	40	\$3,200	0	\$0	\$0	\$0	40	\$3,200
Total Hours Per Category	184		84				268	Total Project Cost
Total Costs Per Category		\$14,720		\$6,720	\$9,210	\$0		\$30,650