PROFESSIONAL CONSULTANT SERVICES AGREEMENT

GEOLOGIC ASSOCIATES, INC.

RFP No. 2098

Water Quality Monitoring and Reporting Services for the Inactive Tequesquite Landfill, Riverside California

THIS PROFESSIONAL	CONSULTANT	SERVICES AGREEMENT ("Agreement") is
made and entered into this	day of	, 2021 ("Effective Date"), by and
between the CITY OF RIVERSI	DE, a California	charter city and municipal corporation ("City"),
and GEOLOGIC ASSOCIATES	, INC. a Californi	a corporation, ("Consultant").

- 1. **Scope of Services**. City agrees to retain and does hereby retain Consultant and Consultant agrees to provide the services more particularly described in Exhibit "A," "Scope of Services" ("Services"), attached hereto and incorporated herein by reference, in conjunction with Water Quality Monitoring and Reporting Services for the Inactive Tequesquite Landfill ("Project").
- 2. **Term**. This Agreement shall be effective on the date first written above and shall remain in effect until June 30, 2024. Upon the mutual agreement of the parties, this term may be extended for up to two (2) additional one (1) year terms not to exceed two (2) years based upon acceptable performance of the Consultant, acceptable fees and subject to the same terms and conditions of this Agreement.
- 3. **Compensation/Payment**. Consultant shall perform the Services under this Agreement for the total sum not to exceed One Hundred Forty-Nine Thousand Nine Hundred Eighty-Nine Dollars (\$149,989) payable in accordance with the terms set forth in Exhibit "B." Said payment shall be made in accordance with City's usual accounting procedures upon receipt and approval of an itemized invoice setting forth the services performed. The invoices shall be delivered to City at the address set forth in Section 4 hereof.
- 4. **Notices**. Any notices required to be given, hereunder shall be in writing and shall be personally served or given by mail. Any notice given by mail shall be deemed given when deposited in the United States Mail, certified and postage prepaid, addressed to the party to be served as follows:

To City

City of Riverside Public Works, Sewer Attn: Wastewater Regulatory & Technical Services Manager 5950 Acorn Street 825 Riverside, CA 92504

To Consultant

Geologic Associates, Inc. Attn: Michel Reason 2777 East Guasti Road, Suite 1 Ontario, CA 91761

- 5. Prevailing Wage. If applicable, Consultant and all subcontractors are required to pay the general prevailing wage rates of per diem wages and overtime and holiday wages determined by the Director of the Department of Industrial Relations under Section 1720 et seq. of the California Labor Code and implemented by Resolution No. 13346 of the City Council of the City of Riverside. The Director's determination is available on-line at www.dir.ca.gov/dlsr/DPreWageDetermination.htm and is referred to and made a part hereof; the wage rates therein ascertained, determined, and specified are referred to and made a part hereof as though fully set forth herein.
- 6. **Contract Administration**. A designee of the City will be appointed in writing by the City Manager or Department Director to administer this Agreement on behalf of City and shall be referred to herein as Contract Administrator.
- 7. **Standard of Performance**. While performing the Services, Consultant shall exercise the reasonable professional care and skill customarily exercised by reputable members of Consultant's profession practicing in the Metropolitan Southern California Area, and shall use reasonable diligence and best judgment while exercising its professional skill and expertise.
- 8. **Personnel**. Consultant shall furnish all personnel necessary to perform the Services and shall be responsible for their performance and compensation. Consultant recognizes that the qualifications and experience of the personnel to be used are vital to professional and timely completion of the Services. The key personnel listed in Exhibit "C" attached hereto and incorporated herein by this reference and assigned to perform portions of the Services shall remain assigned through completion of the Services, unless otherwise mutually agreed by the parties in writing, or caused by hardship or resignation in which case substitutes shall be subject to City approval.
- 9. **Assignment and Subcontracting**. Neither party shall assign any right, interest, or obligation in or under this Agreement to any other entity without prior written consent of the other party. In any event, no assignment shall be made unless the assignee expressly assumes the obligations of assignor under this Agreement, in a writing satisfactory to the parties. Consultant acknowledges that any assignment may, at the City's sole discretion, require City Manager and/or City Council approval. Consultant shall not subcontract any portion of the work required by this Agreement without prior written approval by the responsible City Contract Administrator. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement, including without limitation, the insurance obligations set forth in Section 12. The Consultant acknowledges and agrees that the City is an intended beneficiary of any work performed by any subcontractor for purposes of establishing a duty of care between any subcontractor and the City.
- 10. **Independent Contractor**. In the performance of this Agreement, Consultant, and Consultant's employees, subcontractors and agents, shall act in an independent capacity as independent contractors, and not as officers or employees of the City of Riverside. Consultant acknowledges and agrees that the City has no obligation to pay or withhold state or federal taxes or to provide workers' compensation or unemployment insurance to Consultant, or to Consultant's employees, subcontractors and agents. Consultant, as an independent contractor, shall be responsible for any and all taxes that apply to Consultant as an employer.

11. Indemnification.

- 11.1 **Design Professional Defined**. For purposes of this Agreement, "Design Professional" includes the following:
 - A. An individual licensed as an architect pursuant to Chapter 3 (commencing with Section 5500) of Division 3 of the Business and Professions Code, and a business entity offering architectural services in accordance with that chapter.
 - B. An individual licensed as a landscape architect pursuant to Chapter 3.5 (commencing with Section 5615) of Division 3 of the Business and Professions Code, and a business entity offering landscape architectural services in accordance with that chapter.
 - C. An individual registered as a professional engineer pursuant to Chapter 7 (commencing with Section 6700) of Division 3 of the Business and Professions Code, and a business entity offering professional engineering services in accordance with that chapter.
 - D. An individual licensed as a professional land surveyor pursuant to Chapter 15 (commencing with Section 8700) of Division 3 of the Business and Professions Code, and a business entity offering professional land surveying services in accordance with that chapter.
- Defense Obligation For Design Professional Liability. Consultant agrees, 11.2 at its cost and expense, to promptly defend the City, and the City's employees, officers, managers, agents and council members (collectively the "Parties to be Defended") from and against any and all claims, allegations, lawsuits, arbitration proceedings, administrative proceedings, regulatory proceedings, or other legal proceedings to the extent the same arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of Consultant, or anyone employed by or working under the Consultant or for services rendered to the Consultant in the performance of the Agreement, notwithstanding that the City may have benefited from its work or services and whether or not caused in part by the negligence of an Indemnified Party. Consultant agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel acceptable to City. Consultant will reimburse City for reasonable defense costs for claims arising out of Consultant's professional negligence based on the percentage of Consultant's liability. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant's Services under this Agreement.
- 11.3 Indemnity For Design Professional Liability. When the law establishes a professional standard of care for Consultant's services, to the fullest extent permitted by law, Consultant shall indemnify, protect and hold harmless the City and the City's employees, officers, managers, agents, and Council Members ("Indemnified Parties") from and against any and all claim for damage, charge, lawsuit, action, judicial, administrative, regulatory or arbitration proceeding, damage, cost, expense (including counsel and expert fees), judgment, civil fines and penalties,

liabilities or losses of any kind or nature whatsoever to the extent the same arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of Consultant, or anyone employed by or working under the Consultant or for services rendered to the Consultant in the performance of the Agreement, notwithstanding that the City may have benefited from its work or services and whether or not caused in part by the negligence of an Indemnified Party.

Consultant agrees, at its cost and expense, to promptly defend the City, and the City's employees, officers, managers, agents and council members (collectively the "Parties to be Defended") from and against any and all claims, allegations, lawsuits, arbitration proceedings, administrative proceedings, regulatory proceedings, or other legal proceedings which arise out of, or relate to, or are in any way connected with: 1) the Services, work, activities, operations, or duties of the Consultant, or of anyone employed by or working under the Consultant, or 2) any breach of the Agreement by the Consultant. This duty to defend shall apply whether or not such claims, allegations, lawsuits or proceedings have merit or are meritless, or which involve claims or allegations that any or all of the Parties to be Defended were actively, passively, or concurrently negligent, or which otherwise assert that the Parties to be Defended are responsible, in whole or in part, for any loss, damage or injury. Consultant agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel acceptable to City. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant's Services under this Agreement.

11.5 Indemnity For Other Than Design Professional Liability. Except as to the sole negligence or willful misconduct of the City, Consultant agrees to indemnify, protect and hold harmless the Indemnified Parties from and against any claim for damage, charge, lawsuit, action, judicial, administrative, regulatory or arbitration proceeding, damage, cost, expense (including counsel and expert fees), judgment, civil fine and penalties, liabilities or losses of any kind or nature whatsoever whether actual, threatened or alleged, which arise out of, pertain to, or relate to, or are a consequence of, or are attributable to, or are in any manner connected with the performance of the Services, work, activities, operations or duties of the Consultant, or anyone employed by or working under the Consultant or for services rendered to Consultant in the performance of this Agreement, notwithstanding that the City may have benefited from its work or services. This indemnification provision shall apply to any acts, omissions, negligence, recklessness, or willful misconduct, whether active or passive, on the part of the Consultant or anyone employed or working under the Consultant.

12. Insurance.

- 12.1 **General Provisions**. Prior to the City's execution of this Agreement, Consultant shall provide satisfactory evidence of, and shall thereafter maintain during the term of this Agreement, such insurance policies and coverages in the types, limits, forms and ratings required herein. The rating and required insurance policies and coverages may be modified in writing by the City's Risk Manager or City Attorney, or a designee, unless such modification is prohibited by law.
- 12.1.1 **Limitations**. These minimum amounts of coverage shall not constitute any limitation or cap on Consultant's indemnification obligations under Section 11 hereof.

- 12.1.2 **Ratings**. Any insurance policy or coverage provided by Consultant or subcontractors as required by this Agreement shall be deemed inadequate and a material breach of this Agreement, unless such policy or coverage is issued by insurance companies authorized to transact insurance business in the State of California with a policy holder's rating of A or higher and a Financial Class of VII or higher.
- 12.1.3 **Cancellation**. The policies shall not be canceled unless thirty (30) days' prior written notification of intended cancellation has been given to City by certified or registered mail, postage prepaid.
- 12.1.4 Adequacy. The City, its officers, employees and agents make no representation that the types or limits of insurance specified to be carried by Consultant pursuant to this Agreement are adequate to protect Consultant. If Consultant believes that any required insurance coverage is inadequate, Consultant will obtain such additional insurance coverage as Consultant deems adequate, at Consultant's sole expense.
- 12.2 Workers' Compensation Insurance. By executing this Agreement, Consultant certifies that Consultant is aware of and will comply with Section 3700 of the Labor Code of the State of California requiring every employer to be insured against liability for workers' compensation, or to undertake self-insurance before commencing any of the work. Consultant shall carry the insurance or provide for self-insurance required by California law to protect said Consultant from claims under the Workers' Compensation Act. Prior to City's execution of this Agreement, Consultant shall file with City either 1) a certificate of insurance showing that such insurance is in effect, or that Consultant is self-insured for such coverage, or 2) a certified statement that Consultant has no employees, and acknowledging that if Consultant does employ any person, the necessary certificate of insurance will immediately be filed with City. Any certificate filed with City shall provide that City will be given ten (10) days' prior written notice before modification or cancellation thereof.
- 12.3 Commercial General Liability and Automobile Insurance. Prior to City's execution of this Agreement, Consultant shall obtain, and shall thereafter maintain during the term of this Agreement, commercial general liability insurance and automobile liability insurance as required to insure Consultant against damages for personal injury, including accidental death, as well as from claims for property damage, which may arise from or which may concern operations by anyone directly or indirectly employed by, connected with, or acting for or on behalf of Consultant. The City, and its officers, employees and agents, shall be named as additional insureds under the Consultant's insurance policies.
- 12.3.1 Consultant's commercial general liability insurance policy shall cover both bodily injury (including death) and property damage (including, but not limited to, premises operations liability, products-completed operations liability, independent contractor's liability, personal injury liability, and contractual liability) in an amount not less than \$1,000,000 per occurrence and a general aggregate limit in the amount of not less than \$2,000,000.
- 12.3.2 Consultant's automobile liability policy shall cover both bodily injury and property damage in an amount not less than \$1,000,000 per occurrence and an aggregate limit of not less than \$1,000,000. All of Consultant's automobile and/or commercial general liability

insurance policies shall cover all vehicles used in connection with Consultant's performance of this Agreement, which vehicles shall include, but are not limited to, Consultant owned vehicles, Consultant leased vehicles, Consultant's employee vehicles, non-Consultant owned vehicles and hired vehicles.

12.3.3 Prior to City's execution of this Agreement, copies of insurance policies or original certificates along with additional insured endorsements acceptable to the City evidencing the coverage required by this Agreement, for both commercial general and automobile liability insurance, shall be filed with City and shall include the City and its officers, employees and agents, as additional insureds. Said policies shall be in the usual form of commercial general and automobile liability insurance policies, but shall include the following provisions:

It is agreed that the City of Riverside, and its officers, employees and agents, are added as additional insureds under this policy, solely for work done by and on behalf of the named insured for the City of Riverside.

12.3.4 The insurance policy or policies shall also comply with the following provisions:

- a. The policy shall be endorsed to waive any right of subrogation against the City and its sub-consultants, employees, officers and agents for services performed under this Agreement.
- b. If the policy is written on a claims made basis, the certificate should so specify and the policy must continue in force for one year after completion of the services. The retroactive date of coverage must also be listed.
- c. The policy shall specify that the insurance provided by Consultant will be considered primary and not contributory to any other insurance available to the City and Endorsement No. CG 20010413 shall be provided to the City.
- 12.4 Errors and Omissions Insurance. Prior to City's execution of this Agreement, Consultant shall obtain, and shall thereafter maintain during the term of this Agreement, errors and omissions professional liability insurance in the minimum amount of \$1,000,000 to protect the City from claims resulting from the Consultant's activities.
- 12.5 **Subcontractors' Insurance**. Consultant shall require all of its subcontractors to carry insurance, in an amount sufficient to cover the risk of injury, damage or loss that may be caused by the subcontractors' scope of work and activities provided in furtherance of this Agreement, including, but without limitation, the following coverages: Workers Compensation, Commercial General Liability, Errors and Omissions, and Automobile liability. Upon City's request, Consultant shall provide City with satisfactory evidence that Subcontractors have obtained insurance policies and coverages required by this section.

- 13. **Business Tax.** Consultant understands that the Services performed under this Agreement constitutes doing business in the City of Riverside, and Consultant agrees that Consultant will register for and pay a business tax pursuant to Chapter 5.04 of the Riverside Municipal Code and keep such tax certificate current during the term of this Agreement.
- 14. **Time of Essence**. Time is of the essence for each and every provision of this Agreement.
- 15. **City's Right to Employ Other Consultants**. City reserves the right to employ other Consultants in connection with the Project. If the City is required to employ another consultant to complete Consultant's work, due to the failure of the Consultant to perform, or due to the breach of any of the provisions of this Agreement, the City reserves the right to seek reimbursement from Consultant.
- 16. Accounting Records. Consultant shall maintain complete and accurate records with respect to costs incurred under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a representative of City during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.
- 17. **Confidentiality**. All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other materials either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant, except as otherwise directed by City's Contract Administrator. Nothing furnished to Consultant which is otherwise known to the Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use City's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production, website, or other similar medium without the prior written consent of the City.
- 18. **Ownership of Documents**. All reports, maps, drawings and other contract deliverables prepared under this Agreement by Consultant shall be and remain the property of City. Consultant shall not release to others information furnished by City without prior express written approval of City.
- 19. **Copyrights.** Consultant agrees that any work prepared for City which is eligible for copyright protection in the United States or elsewhere shall be a work made for hire. If any such work is deemed for any reason not to be a work made for hire, Consultant assigns all right, title and interest in the copyright in such work, and all extensions and renewals thereof, to City, and agrees to provide all assistance reasonably requested by City in the establishment, preservation and enforcement of its copyright in such work, such assistance to be provided at City's expense but without any additional compensation to Consultant. Consultant agrees to waive all moral rights relating to the work developed or produced, including without limitation any and all rights of identification of authorship and any and all rights of approval, restriction or limitation on use or subsequent modifications.

- 20. **Conflict of Interest**. Consultant, for itself and on behalf of the individuals listed in Exhibit "C," represents and warrants that by the execution of this Agreement, they have no interest, present or contemplated, in the Project affected by the above-described Services. Consultant further warrants that neither Consultant, nor the individuals listed in Exhibit "C" have any real property, business interests or income interests that will be affected by this project or, alternatively, that Consultant will file with the City an affidavit disclosing any such interest.
- 21. **Solicitation**. Consultant warrants that Consultant has not employed or retained any person or agency to solicit or secure this Agreement, nor has it entered into any agreement or understanding for a commission, percentage, brokerage, or contingent fee to be paid to secure this Agreement. For breach of this warranty, City shall have the right to terminate this Agreement without liability and pay Consultant only for the value of work Consultant has actually performed, or, in its sole discretion, to deduct from the Agreement price or otherwise recover from Consultant the full amount of such commission, percentage, brokerage or commission fee. The remedies specified in this section shall be in addition to and not in lieu of those remedies otherwise specified in this Agreement.
- 22. **General Compliance With Laws**. Consultant shall keep fully informed of federal, state and local laws and ordinances and regulations which in any manner affect those employed by Consultant, or in any way affect the performance of services by Consultant pursuant to this Agreement. Consultant shall at all times observe and comply with all such laws, ordinances and regulations, and shall be solely responsible for any failure to comply with all applicable laws, ordinances and regulations. Consultant represents and warrants that Consultant has obtained all necessary licenses to perform the Scope of Services and that such licenses are in good standing. Consultant further represents and warrants that the services provided herein shall conform to all ordinances, policies and practices of the City of Riverside.
- 23. Waiver. No action or failure to act by the City shall constitute a waiver of any right or duty afforded City under this Agreement, nor shall any such action or failure to act constitute approval of or acquiescence in any breach thereunder, except as may be specifically, provided in this Agreement or as may be otherwise agreed in writing.
- 24. **Amendments.** This Agreement may be modified or amended only by a written agreement and/or change order executed by the Consultant and City.
- 25. **Termination**. City, by notifying Consultant in writing, shall have the right to terminate any or all of Consultant's services and work covered by this Agreement at any time. In the event of such termination, Consultant may submit Consultant's final written statement of the amount of Consultant's services as of the date of such termination based upon the ratio that the work completed bears to the total work required to make the report complete, subject to the City's rights under Sections 15 and 26 hereof. In ascertaining the work actually rendered through the termination date, City shall consider completed work, work in progress and complete and incomplete reports and other documents only after delivered to City.
- 25.1 Other than as stated below, City shall give Consultant thirty (30) days' prior written notice prior to termination.

- 25.2 City may terminate this Agreement upon fifteen (15) days' written notice to Consultant, in the event:
- 25.2.1 Consultant substantially fails to perform or materially breaches the Agreement; or
 - 25.2.2 City decides to abandon or postpone the Project.
- 26. Offsets. Consultant acknowledges and agrees that with respect to any business tax or penalties thereon, utility charges, invoiced fee or other debt which Consultant owes or may owe to the City, City reserves the right to withhold and offset said amounts from payments or refunds or reimbursements owed by City to Consultant. Notice of such withholding and offset, shall promptly be given to Consultant by City in writing. In the event of a dispute as to the amount owed or whether such amount is owed to the City, City will hold such disputed amount until either the appropriate appeal process has been completed or until the dispute has been resolved.
- 27. **Successors and Assigns**. This Agreement shall be binding upon City and its successors and assigns, and upon Consultant and its permitted successors and assigns, and shall not be assigned by Consultant, either in whole or in part, except as otherwise provided in paragraph 9 of this Agreement.
- 28. **Venue.** Any action at law or in equity brought by either of the parties hereto for the purpose of enforcing a right or rights provided for by this Agreement shall be tried in the Superior Court, County of Riverside, State of California, and the parties hereby waive all provisions of law providing for a change of venue in such proceedings to any other county. In the event either party hereto shall bring suit to enforce any term of this Agreement or to recover any damages for and on account of the breach of any term or condition of this Agreement, it is mutually agreed that each party will bear their own attorney's fees and costs.
- 29. **Nondiscrimination**. During Consultant's performance of this Agreement, Consultant shall not discriminate on the grounds of race, religious creed, color, national origin, ancestry, age, physical disability, mental disability, medical condition, including the medical condition of Acquired Immune Deficiency Syndrome (AIDS) or any condition related thereto, marital status, sex, genetic information, gender, gender identity, gender expression, or sexual orientation, military and veteran status, in the selection and retention of employees and subcontractors and the procurement of materials and equipment, except as provided in Section 12940 of the California Government Code. Further, Consultant agrees to conform to the requirements of the Americans with Disabilities Act in the performance of this Agreement.
- 30. Severability. Each provision, term, condition, covenant and/or restriction, in whole and in part, of this Agreement shall be considered severable. In the event any provision, term, condition, covenant and/or restriction, in whole and/or in part, of this Agreement is declared invalid, unconstitutional, or void for any reason, such provision or part thereof shall be severed from this Agreement and shall not affect any other provision, term, condition, covenant and/or restriction of this Agreement, and the remainder of the Agreement shall continue in full force and effect.

- 31. **Authority**. The individuals executing this Agreement and the instruments referenced herein on behalf of Consultant each represent and warrant that they have the legal power, right and actual authority to bind Consultant to the terms and conditions hereof and thereof.
- 32. **Entire Agreement**. This Agreement constitutes the final, complete, and exclusive statement of the terms of the agreement between the parties pertaining to the subject matter of this Agreement, and supersedes all prior and contemporaneous understandings or agreements of the parties. Neither party has been induced to enter into this Agreement by and neither party is relying on, any representation or warranty outside those expressly set forth in this Agreement.
- 33. **Interpretation**. City and Consultant acknowledge and agree that this Agreement is the product of mutual arms-length negotiations and accordingly, the rule of construction, which provides that the ambiguities in a document shall be construed against the drafter of that document, shall have no application to the interpretation and enforcement of this Agreement.
- 33.1 Titles and captions are for convenience of reference only and do not define, describe or limit the scope or the intent of the Agreement or any of its terms. Reference to section numbers, are to sections in the Agreement unless expressly stated otherwise.
- 33.2 This Agreement shall be governed by and construed in accordance with the laws of the State of California in effect at the time of the execution of this Agreement.
- 33.3 In the event of a conflict between the body of this Agreement and Exhibit "A" Scope of Services hereto, the terms contained in Exhibit "A" shall be controlling.
- 34. **Exhibits**. The following exhibits attached hereto are incorporated herein to this Agreement by this reference:

Exhibit "A" - Scope of Services

Exhibit "B" - Compensation

Exhibit "C" - Key Personnel

IN WITNESS WHEREOF, City and Consultant have caused this Agreement to be duly executed the day and year first above written.

CITY OF RIVERSIDE, a California charter city and municipal corporation	GEOLOGIC ASSOCIATES, INC., a California corporation
By: City Manager	By: Crary L. Lyss [Printed Name]
Attest:	[Title]
City Clerk	
Certified as to Availability of Funds:	By: Michael D. Reason [Printed Name]
Chief Financial Officer	[Printed Name] Vice President [Title]
Approved as to Form:	
By: Ruthann Salera	
Deputy City Attorney	

21-0789 RMS 8/20/21

EXHIBIT "A" SCOPE OF SERVICES

EXHIBIT A

Scope of Services

Proposers must have the capability of providing the full range of services outlined in the following Scope of Services and shall describe their capacity to provide the following services:

A. Groundwater, Surface Water, and October Leachate Sampling

Sample collection, handling, and storage shall be performed in accordance with the most recent version of the Standards USEPA Methods (USEPA Publication "SW-846"). Consultant shall provide all bottles, vials, containers, etc. necessary for sample collection and analysis. Sample containers shall be properly labeled including but not limited to, a unique well or surface sampling point identification, collection time and date, initials of the person collecting the samples, and analyses required for each sample.

Monitoring parameters and frequency for the required water quality, surface water, and landfill gas condensate monitoring are found in Monitoring and Reporting Program 98-99-06 and the Monitoring and Reporting Program 98-99-06 Modification Approval letter from July 2009.

B. Laboratory Analyses

The Consultant will ensure that the samples are analyzed within the EPA-prescribed holding times and are completed in accordance with the most recent version of the Standards USEPA Methods. If the Consultant wishes to contract a laboratory to do the analyses, the Consultant shall ensure the laboratory is accredited by ELAP or NELAP.

The Consultant will review reports from the laboratory to ensure that all required analyses have been performed, and to compare the results with historical data to pre-screen for anomalous or suspect results. Data anomalies will be identified and resolved with field and laboratory personnel and shared with City staff.

C. Data Analysis and Reporting

The Consultant will prepare semi-annual and annual water quality monitoring reports addressing all requirements in the M&RP. The report will contain the following sections:

- Executive Summary
- List of Acronyms and Abbreviations
- List of Definitions
- Introduction
- Sampling and Analysis Plan
- Laboratory Analysis and QA/QC Results
- Data Analysis
 - o Statistical Methods
 - o ARARs (Applicable or Relevant and Appropriate Requirements)
- Water Quality Monitoring Results
 - Water and Surface Water Monitoring Activities
 - o Groundwater Potentiometric Surface Elevations

- Groundwater Elevation Data (for the quarter covered)
- Groundwater Elevation Data (for the other quarter covered)
- Monitoring Analytical Results
 - Groundwater
 - New Historical Intrawell Maximum Concentrations
 - Statistical Analysis of Water Quality Data
 - Comparisons with ARARs
 - Concentration Limit Comparison (if applicable)
 - Surface Water
 - New Historical Intrawell Maximum Concentrations
 - Comparisons with ARARs
 - Concentration Limit Comparison (if applicable)
 - o Annual Summary (if applicable)
 - Groundwater Data Trends
 - Surface Water Data Trends
 - o Conclusions and Recommendations
- Correction Action Program Comparisons (if applicable)
- Closure
- References
- Tables
- Figures
- Appendices
- Field Sample Collection Log
- Chain of Custody Records and Certificates of Analysis
- Facility Standard and Observation Monitoring

The Consultant will report chemistry data analysis in a tabular form; comparing them to historical data. Laboratory reports and field notes will be compiled into appendices. If new releases of volatile compounds or any pollutants are identified, the Consultant will notify the City immediately via email and/or telephone call and advise the City on verification procedures and regulatory notifications. Consultant will provide support to retest as needed and counsel on regulatory negotiations.

The Consultant will prepare semi-annual and annual water quality monitoring reports in time to meet the regulatory deadlines. The City expects to, and the consultant shall allocate sufficient time for, review and comment of draft reports. The consultant will be expected to review City comments, facilitate and support discussion and resolution of any comments and issues raised, and revise reports accordingly.

For the semi-annual reports, drafts will be submitted to the City for review by the 15th of the month of submittal (April and October). The annual summary reports (monitoring period April 1 of previous year to March 31), both in hard copy and electronic version, will be submitted to the RWQCB on or before the submittal due date of April 30 as outlined in Table A of the M&RP. All reports must bear the signature, stamp, and contact information of the preparer or their project manager.

D. Regulatory Liaison Support

The Consultant will provide the City with regulatory liaison support should the RWQCB, or any other agency having jurisdiction over the landfill, have any questions regarding reports, groundwater chemistry data, or conclusions derived from the data.



Statement of Understanding and Approach

GLA understands that the City will retain the services of a qualified environmental consultant to provide routine sampling and reporting services to support regulatory compliance with the site-specific groundwater monitoring and reporting program developed by the Santa Ana RWQCB. This work will include quarterly water level gauging, and semiannual sampling, analyses, and reporting. Each monitoring event will include a variety of tasks as outlined below:

Preparation of a Health and Safety Plan: Prior to initiating field work, the GLA Team will review our existing site-specific Health and Safety Plan (HASP) and update the HASP, as needed for the Tequesquite Landfill. The HASP will detail methods and procedures to protect workers from existing and potential hazards during field operations. The HASP will take site-specific conditions into account and will follow CAL-OSHA regulations and the most current U.S. EPA Standard Operating Safety Guides. At a minimum, the HASP will address:

- Site locations and anticipated conditions
- Location of nearby hospitals and emergency control agencies
 Personnel and equipment monitoring
- Site and office support contacts
- Brief descriptions of anticipated field activities
- Anticipated chemical, biological, and physical hazards
- Brief description of safe field procedures

- Description of relevant mitigation measures
- Personnel and equipment monitoring procedures
- Description of personnel protective equipment
- Description of additional safety equipment
- Contingency plans
- · Emergency procedures and protocols

Environmental Sampling: Approximately one to two weeks prior to mobilization for each sampling event, GLA will order sample containers from BC Laboratories, Inc., the contract laboratory. The laboratory will be notified of the number of monitoring points and the appropriate analytical parameters to be analyzed for each sample matrix, and the laboratory will be directed to provide extra containers for collection of appropriate field and equipment blanks. GLA's sampling personnel will ensure that all sample bottles are "clean-certified" from the laboratory or supplier. Sample containers that appear dirty, used, or otherwise compromised will not be used. Sample bottles containing preservatives will be appropriately marked. Sample shipping containers, coolers, ice packs, and any other materials that may contact sample bottles will be regularly inspected for cleanliness, durability, and functionality. Damaged coolers will not be used, as they may compromise sample integrity.

Groundwater Sampling: Single samples will be collected from each monitoring point that is required to be sampled, and these samples will be analyzed for the monitoring parameters specified in the site M&RPs. Groundwater samples will be collected following the procedures outlined in the *Practical Guide for Groundwater Sampling* (Barcelona, et al., 1985), *RCRA Groundwater Monitoring Technical Enforcement Guidance Document* (U.S. EPA, 1986). All sampling will be completed within a maximum 30-day time period. GLA understand that wells are equipped with electronic and bladder pumps, and some wells do not have pumps. Wells equipped with bladder pumps are sampled using low-flow methods, while wells equipped with electronic submersible pumps are sampled using standard purge methods. For wells that are not equipped with dedicated sampling pumps or if the pump is inoperable, the wells will be



sampled with portable equipment, (e.g., decontaminated bailers or pumps) and the actual sampling method though variable will comply with the standard protocols outlined below.

Upon arrival at each wellhead, the well will be inspected and any well-head problems will be noted on the field log. Significant problems with the well-head, such as those that prevent sampling or compromise the integrity of the well, will be reported to the City (verbally and in writing) within 24 hours of observation. Prior to sampling a well, the depth to groundwater will be measured to the nearest 0.01 foot from an established well datum (e.g., top of casing) using a decontaminated electric sounding device. The depth to water will then be used to calculate the water surface elevations in the wells, and to calculate appropriate purge volumes. To evaluate groundwater flow conditions beneath the landfill, during each sampling event, groundwater depths will be measured on the same day, if possible, in all accessible site wells and piezometers.

Well purging will be accomplished using existing dedicated pumps, or in the absence of dedicated systems, using decontaminated pumps or bailers, or no-purge passive HydraSleeve™ samplers. Samples of purged water will be collected and monitored, and purging rates will be low enough so as not to induce turbulent (i.e., non-laminar) flow within the well. As a well is purged, indicator parameters (pH, temperature, specific conductance, dissolved oxygen, and turbidity) will be monitored and recorded until they have stabilized to within 10 percent of the preceding measurements and show no discernible upward or downward trend. Flow-through cells will be used to measure field parameters at wells that are purged with pumps. For sampling locations where pumps are not used (e.g., wells without pumps and surface water sampling locations), a sample will be collected in a clean container, the field instrument probe will be placed in the container, and appropriate field measurements will be recorded on the sample collection log.

GLA recognizes that many of the field parameters (such as pH and dissolved oxygen) have a very short holding time, and therefore careful calibration of the field instruments must be maintained so that accurate results can be obtained in the field. GLA will accomplish this calibration by working closely with our analytical laboratory to establish instrument calibration in a fixed laboratory setting on a regular basis. In the field, the instruments will be calibrated before work begins at each sampling location.

Sampling from wells with dedicated sampling apparatus will be conducted by slowing the pumping rate, as appropriate, and allowing the discharge water to flow gently into appropriate sample containers. Should bailing be required, the bailer will be slowly lowered into the water column to minimize disturbance to the collected sample, and a bottom emptying device will be inserted into the bottom of the bailer to release the sample into the sample containers. For wells that have very slow recharge rates (i.e., more than two hours to recover to 80 percent of its original water level), the well will be purged dry and a sample will be collected after the water level has recovered to within approximately 80 percent of its original level.



Several wells will also be sampled using the no-purge HydraSleeve[™] passive sampling device and has been shown to provide comparable results to traditional sampling methods. This sampler has been especially advantageous to use in sampling slow recharge wells, which may require purging the well dry and waiting for the well to recover over a period of several hours or overnight for sufficient water to be present for sampling. The HydraSleeve[™] sampling device is a polyethylene sleeve, typically 30 to 36 inches long, but can be as long as 60 inches to obtain a greater sample volume, and is attached to a tether tied to the well cap and deployed into the well with a bottom, and possibly, top weight. The device can be deployed a day before the sampling event (e.g., following measurement of the water level in the well), or will be deployed following a sampling event and left hanging in the well until the next semiannual sampling event.

Water pressure keeps the sleeve collapsed and the check valve closed during deployment. For sampling, the sleeve is removed from the well at a rate faster than one foot per second to allow the check valve to open and completely fill the HydraSleeve™. Once the sleeve is filled, the check valve will close preventing loss of sample and entry of water from zones above the well screen as the sleeve is recovered. A sampling tube is inserted into the sleeve to release the sample into the sample containers.

As permitted by the RWQCB in their letter to the Riverside Department of Public Works dated June 28, 1999, water that is purged from each well and not delivered to a sampling container will be broadcasted to the ground surface near the source well. Steel drums or other containers will not be used to store unused purge water.

Sample containers will be provided by BC and will be stored in an area that is free from dust and exposure to organic chemicals. All groundwater samples will be poured from the pump discharge or bailer directly into the sample containers by pouring the sample down the sides of the container with as little turbulence as possible. Sampling containers will be filled in order of volatility (volatile organic compounds first, then semi-volatile organic compounds, pesticides, herbicides, general chemistry, and metals). Vials for volatile organic analyses will be filled completely to fill all the air space, capped, turned upside down, and tapped to check for air bubbles.

Trip blanks will accompany sample containers from the laboratory, through the field operations, and return to the laboratory as a QC check to determine if contamination has been introduced from the sample containers or laboratory water. Trip blanks will constitute at least ten percent of the total number of groundwater samples. If non-dedicated sampling equipment is used, equipment blanks will also be collected and will consist of distilled, deionized, reagent-grade laboratory water passed through representative sampling equipment (e.g., bailers, bottom emptying devices) as a test of equipment decontamination. One equipment blank will be collected per groundwater monitoring event. Field blanks will be collected at a frequency of one per day by pouring laboratory provided reagent-grade water directly into a set of sample vials as a test of site-specific environmental conditions.



After a sample has been collected, it will be stored in a field ice chest where ice cubes or "blue ice" packs will be used to cool and maintain the samples at a temperature of approximately 4°C. To prevent breakage, bubble wrap or an alternative material will be placed around the samples so they do not touch each other or the side of the shipping container. Each sample will be catalogued on appropriate Chain-of-Custody documentation after it has been collected, and these Chain-of-Custody records, and other appropriate paperwork, will be sealed in a plastic bag taped to the lid of the shipping container and will accompany each sample to the analytical laboratory. It is anticipated that samples will be provided to the laboratory courier at the end of each sampling day, and the field sampler will be responsible for the care and custody of the samples until they are shipped or otherwise delivered to the laboratory custodian.

As discussed in the following sections, GLA will review analytical data promptly upon receipt of certificates of analysis, and will identify any VOCs or other anthropogenic compounds that might indicate landfill release or problematic groundwater treatment system chemistry. During this review, GLA will develop a listing of wells (and thereby the purge water drums) that contain VOCs, the VOC concentrations measured and the approximate purge volumes. The GLA Team will dispose of purge waters in accordance with established protocols. Purge water that does not contain VOCs will be disposed of at the site in a manner that does not impact the monitoring well, other landfill structures, or landfill cover soils.

Surface Water Sampling: Surface water samples will be collected from the designated sampling points when there is sufficient water available for sampling. Samples will be collected without disturbing the channel bottom or otherwise changing the observed flow conditions and sediment load of the channel or pond. Sample bottles will be filled to minimize air space in the sample containers. After the samples are collected, they will be sealed, labeled, and placed in the cooler for transport to the laboratory.

Miscellaneous Liquids Grab Sampling: Annual grab samples will be collected from the landfill gas condensate sampling points during the fourth quarter monitoring event. Grab samples are generally collected by filling laboratory supplied sample containers using a new, factory-sealed disposable bailer equipped with a bottom emptying device or directly from the condensate trap. Stringent health and safety protocols will be followed during condensate and leachate sampling to minimize dermal and respiratory exposure. As each sample bottle is carefully filled, allowing the liquid to stream down the side of the sample container, the bottle will be capped, sealed, and labeled, and then placed in a chilled cooler for transport. The sampling process will follow the protocols described above until all bottles are filled. Individual condensate samples will be collected for VOC and hexavalent chromium testing. Condensate sample collection will also include a composite sample for testing that will be generated using aliquots obtained from each individual condensate sample. All liquid grab samples will be catalogued on appropriate Chain-of-Custody documentation that will accompany the samples to the analytical laboratory.

Landfill Groundwater Data Review and Validation: In accordance with GLA's QA/QC protocols, when laboratory analytical reports are received, they are reviewed for completeness and conformance with holding time requirements. Field, travel, and method blank sample results

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are reviewed and blind duplicate samples are compared to primary sample results, and these evaluations are used to validate the data. As laboratory results are received, GLA will review data immediately to identify any data anomalies and to evaluate whether there is evidence of tentative identification of a release from the landfill as a result of a new VOC or elevated concentrations of monitoring parameters. The Team's QA Manager will be responsible for reviewing the field sampling sheets and Chain-of-Custody documentation at the end of each day/week to assess completeness, documentation of equipment calibration, sample handling, chain-of-custody protocols, and consistency of field measurements with historical data. By this frequent review procedure, any deviations in procedures or protocols can be corrected immediately.

Data evaluation will represent the most significant aspect of the monitoring and reporting program since all of the analytical data must be validated. Once validated, the data will be used to provide a basis for interpretation of site conditions at a level that satisfies all of the requirements of the individual site M&RPs and/or RWQCB orders and/or directives.

The validation will be used to assess the adequacy and accuracy of the data, the presence of field or laboratory contamination, and the need for conducting verification retesting as described above.

If a data anomaly is identified, the laboratory is contacted to verify the constituent concentration. Upon verification, this information is transmitted verbally and/or via e-mail to the City's Project Manager with a recommendation for retesting, if appropriate. In some cases (e.g., detection of constituents such as acetone or methylene chloride, which are common laboratory- or field-introduced contaminants), retesting may not be necessary. If the data suggest new evidence of release at any sample point this information will be reported to the City Project Manager immediately.

The semiannual water quality data will be entered into a database and statistically analyzed using RWQCB-accepted statistical methods and the Sanitas® software package. If the current data are consistent with the intrawell historical results and natural spatial variability does not limit the effectiveness of the background comparisons, the current value will be grouped with the historical data and a background-to-compliance contrast test will be performed.

For VOCs and COCs, the California Non-Statistical Data Analysis Method (CNSDAM), as outlined in SWRCB Resolution 93-62 is also performed for those analytes detected less than 10 percent of the time in samples from background wells. GLA will review and evaluate the data and provide prompt identification and notification of non-statistical evidence of a release using CNSDAM. Retests will also be identified in a time frame that can provide meaningful comparison with the primary sample results.

Response Plan for Sampling/Laboratory Contamination: While GLA strives to collect samples that are representative of field conditions, "false positive" indications of release are an expected (and in fact, required) artifact of mandatory statistical evaluations. In addition, identification of

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anomalous constituents as a result of environmental conditions, lapses in sampling protocols, or other field conditions can happen with any program of this size. When analytical results indicate that samples have been impacted, the results of the accompanying QA/QC samples will be evaluated to determine if the samples could have been contaminated during the sample collection or analytical processes. When field contamination is suspected, the sampling procedures will be reviewed with the sampling crew and/or analytical laboratory to minimize the potential for a repeat of the error. [For example, if BTEX components are detected in the field blank, it is possible that the samples were collected downwind of a gasoline-powered engine, and correction may include verification that samples are collected upwind of a potential contaminant source.]

In the case of suspected laboratory contamination, GLA will review the data to identify possible contaminant sources, and will meet with the analytical laboratory to discuss the historical data and potential false positive results. The laboratory will be required to take appropriate measures to identify the cause of laboratory-related sample contamination, and will be required to implement a program to reduce the possibility of future contamination. In any event, if the "false positive" cannot be readily dismissed, as a result of analytical or field QA/QC procedures, GLA will perform a retest of that monitoring point as required. Since the State mandated statistical protocols require a false positive rate of no less than 1%, the GLA Team has assumed that 1 or 2 discrete retests will be required during each sampling event.

Verification Sampling: If statistical or non-statistical analyses of the analytical results indicate a new release from the TL has occurred, recommendations for verification and immediate RWQCB notification will be submitted pursuant to 27 CCR § 20420(j)(1-3). For purposes of verification, two discrete retest samples will be collected from each monitoring point where contamination is suspected using the same sampling and analytical protocols employed in obtaining the primary sample. Retest samples will be collected within 30 days of the initial indication of the release, and will be analyzed only for those constituents that were identified at concentrations above background in the initial sample. If the compound is not detected in either of the retest samples, then a false positive detection will be concluded for the primary sample. If the compound is detected in one or both of the retest samples, then the primary detection will have been verified.

Should retesting verify a release, a single sample from each DMP monitoring point at that site will then be analyzed for the full list of Constituents of Concern (COCs). While up to 2 retests are anticipated per monitoring event and this cost is included in the enclosed fee estimate, the need for and extent of release-induced COC monitoring cannot be reasonably estimated and this work will be completed as a non-routine work item.

Landfill Release Notification: When laboratory analytical reports are received, they will be date stamped and reviewed by the QA Manager for completeness and conformance with holding time requirements. In addition, for DMP protocols, wells monitored under the non-statistical VOC/COC Special analysis will be carried out to evaluate whether there is evidence for tentative identification of a release from the landfill. If a VOC/COC Special "hit" is identified, this



information is then transmitted verbally to the County's Project Manager with a recommendation for retesting, if appropriate. [It should be noted that in some cases (e.g., detection of constituents such as methylene chloride and toluene, which are common laboratory or field-introduced contaminants), retesting may not be necessary. This conclusion will be reviewed with the City and, if appropriate, negotiated with the RWQCB.] Similarly, after the statistical analyses are completed, the City will be notified if the statistical conclusions suggest evidence of a new release. If the data suggest evidence of release at any DMP well, this information will be reported to the City's Project Manager immediately so that appropriate responses (i.e., RWQCB notifications and retesting) can be implemented. A follow-up letter to provide written documentation and notification of a tentatively identified release to the RWQCB will then be prepared and submitted to City. This notice will include a summary of the laboratory findings, and a copy of the relevant laboratory analytical report(s). The City can then use the letter and laboratory analytical report(s) as a basis for providing the 7-day tentative release notification to the RWQCB required by regulation.

Data Entry: Rather than utilizing a simple digital transfer of data from the laboratory to prepare our tables, GLA proposes to enter all laboratory data manually. We have found this practice to provide the best opportunity for critical review the laboratory data, enabling our staff to identify and resolve potential data anomalies quickly. Laboratory reports will be provided digitally in EDF and PDF format for upload into Geotracker.

Statistical/Non-Statistical Analysis of Groundwater Quality Data: GLA proposes to use Sanitas® statistical software for analysis of groundwater monitoring data. As allowed under CCR Title 27 Section 20415, Both intrawell and interwell statistical methods are used to evaluate the water quality data. If the current data are consistent with the intrawell historical results and natural spatial variability did not limit the effectiveness of the background comparisons, the current value is grouped with the historical data and a background-to-compliance (interwell) contrast test is performed. The statistical software program calculates prediction limits for all routine monitoring parameter data that are normally-distributed or that can be transformed into a normal distribution using logarithmic, exponential, and other mathematical transformation routines. If transformation operations do not result in a normally-distributed database, non-parametric prediction limits will be calculated. The prediction limits will be used to evaluate compliance with water quality standards imposed on the site. In addition, the non-statistical CNSDAM, as outlined in SWRCB Resolution 93-62, will be performed for those analytes detected less than 10 percent of the time in samples from background wells.

Trend Analyses: Analysis of landfill groundwater and surface water quality data trends is an annual reporting requirement for the TL. Trend analyses will be performed by plotting the concentrations of an analyte over the history of monitoring for each well. The Sanitas® statistical software offers an ability to prepare time-series plots for each monitoring parameter or combination of wells. In general, no more than five data sets will be presented on one chart to maximize presentation clarity. The historical sample data from each well will be plotted with a unique symbol marking the data point.



Groundwater Monitoring Report Preparation: Water quality monitoring data will be compiled in semiannual and annual reports. Each semiannual and annual report will contain the information required by Order 98-99-03, as well as information subsequently requested by the Santa Ana RWQCB. At a minimum these reports will include:

- Executive summary
- Table of contents
- Site introduction
- Sampling and analysis plan
- Laboratory analyses and QA/QC results
- Discussion of statistical and/or non-statistical data evaluation
- Historical groundwater elevation data
- A groundwater elevation contour map
- Historical tables of laboratory test results for each monitoring point
- Summary tables of analytical results for the reporting period(s)
- Descriptions of sampling and analytical methods and parameters

As required, monitoring reports will also integrate data collected by GLA's sampling crew including visual observations and photographs of site conditions, copies of the regulatory agency inspections, and copies of the diversion and drainage facilities inspection and evaluation logs. Discussions will be more detailed when chemical and/or elevation variations are noted from earlier reporting periods, and recommendations for verification and/or initiation of additional studies will be presented if appropriate.

The second semiannual monitoring report will contain the elements required of the first semiannual report and will also include the required annual presentation of historical site monitoring data as time-series plots. The report will discuss apparent or significant increasing and/or decreasing trends when noted.

Prior to submittal of any work product to the City, GLA will provide comprehensive senior peer review of all deliverable technical documents. One draft copy of each report will be submitted to the City 15 calendar days prior to the RWQCB submittal dates. Following incorporation of City comments, GLA will prepare copies of the final report for distribution. Reports for all landfill sites are due to the RWQCB by October 31st and April 30th (annual summary report) of each year. The final reports will be signed and stamped by our Project Manager, a State of California Registered Professional Geologist.

GLA will upload the landfill data into the Geotracker database concurrent with submittal of the groundwater monitoring reports. For this task, electronic data files will be prepared by the laboratory and delivered to GLA by email. GLA will then review the files and upload the electronic data to the State's database. A full copy of the report will also be uploaded in portable document format (PDF).

Regulatory Liaison Support: Throughout the course of the project, GLA's Project Manager and Principal-in-Charge will be available to address issues and comments raised by the Santa Ana RWQCB concerning the environmental monitoring and reporting for the TL. Costs for our services include basic interaction with the RWQCB to answer questions about the semiannual monitoring reports, sampling methodologies, data evaluation and other routine questions. Should more complex issues arise that require a higher level of effort to address, GLA will prepare a work scope and cost estimate to address these issues. Costs will be based on the fee schedule provided with our project cost estimate.

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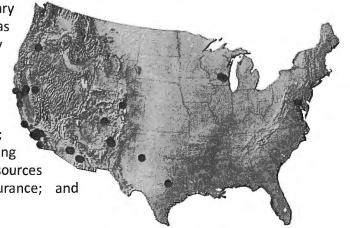
Geo-Logic

Non-Routine Well and Pump Maintenance: In the event that a pump needs to be replaced, these services can be provided by GLA's environmental sampling technicians who have abundant experience in diagnosing and repairing pump problems and replacing inoperable pumps; in many cases during the sampling event. Alternatively, the samplers are equipped with bailers and alternative sampling equipment so that a sample can be collected. If more significant repairs are deemed necessary, the project manager will notify the City and prepare a cost estimate for the needed repair.

Other Non-Routine Services: As a full-service environmental and geotechnical consulting firm, GLA has the resources and technical capabilities to respond to nearly all landfill-related non-routine service requests. Should the City require our services for work outside of the scope of work identified above, GLA will prepare a detailed scope of work and cost estimate based on the fee schedule provided in this proposal.

Company Information

GLA is a privately held multi-disciplinary consulting firm established in 1991. GLA has grown to employ more than 250 highly qualified and experienced professionals located in 27 US offices and an office in Lima, Peru. Principal areas of expertise include civil and geotechnical engineering; geologic and hydrogeologic services; environmental compliance; facility planning and permitting; specialized water resources engineering; construction quality assurance; and geotechnical laboratory services.



GLA has provided a variety of engineering and environmental consulting services to the City at the Tequesquite Landfill (TL) since 1993. This work has included:

- Design and CQA services for closure.
- Routine groundwater monitoring, statistical analysis and reporting;
- Developing and implementing an Evaluation Monitoring Program (EMP) at the site.

GLA succeeded in negotiating significant reductions in the TL routine monitoring program (including a reduction in the number of wells and a reduced frequency from quarterly to semiannual water quality monitoring) that saved the City substantial costs during the post-closure maintenance period; and preparing the site closure certification document that was accepted by the regulatory agencies. As a result of this experience, GLA staff are very familiar with TL groundwater, surface water and condensate monitoring points, the City staff, and perhaps most importantly, with the staff at the Santa Ana Regional Water Quality Control Board who oversee the site's groundwater monitoring and reporting program.

EXHIBIT "B" COMPENSATION

TABLE 1
ESTIMATED PROJECT COSTS - RFP 2098
GROUNDWATER, SURFACE WATER & CONDENSATE MONITORING AND REPORTING SERVICES
TEQUESQUITE LANDFILL, RIVERSIDE COUNTY, CALIFORNIA

	Princ.	Project	Project	Staff	CADD	Tech.	Sampl.	Vehicle	GLA Sub	GLA	Outside	Task
	Pro. I	Pro. III	Pro. II	Pro. II	Design.	IV	Equip.		Total	Total	Lab	Totals
Work Tasks	\$250	\$190	\$170	\$130	\$123	\$136	\$15	\$14	(\$)	(\$)	(\$)	(\$)
FY 21/22												
Task 317 - Third Quarter 2021 Monitoring & Reporting	0.5	4	5	15	3	10	l	10	\$5,429	\$5,429		\$5,429
Task 417 - Fourth Quarter 2021 Monitoring (COCs)				4		52	52	52	\$9,860	\$9,860	\$23,753	\$33,613
Task 118 - First Quarter 2022 Monitoring & Reporting	0.5	4	10	30	3	10		10	\$8,229	\$8,229		\$8,229
Task 218 - Second Quarter 2022 Monitoring				4		40	40	40	\$7,880	\$7,880	\$6,590	\$14,470
FY 22/23												
Task 318 - Third Quarter 2022 Monitoring & Reporting	0.5	4	5	15	3	10	1	10	\$5,429	\$5,429		\$5,429
Task 418 - Fourth Quarter 2022 Monitoring				4		40	40	40	\$7,880	\$7,880	\$8,116	\$15,996
Task 119 - First Quarter 2023 Monitoring & Reporting	0.5	4	10	30	3	10		10	\$8,229	\$8,229		\$8,229
Task 219 - Second Quarter 2023 Monitoring				4		40	40	40	\$7,880	\$7,880	\$6,590	\$14,470
FY 23/24												
Task 319 - Third Quarter 2023 Monitoring & Reporting	0.5	4	5	15	3	10		10	\$5,429	\$5,429		\$5,429
Task 419 - Fourth Quarter 2023 Monitoring				4		40	40	40	\$7,880	\$7,880	\$8,116	\$15,996
Task 120 - First Quarter 2024 Monitoring & Reporting	0.5	4	10	30	3	10		10	\$8,229	\$8,229		\$8,229
Task 220 - Second Quarter 2024 Monitoring	·			4		40	40	40	\$7,880	\$7,880	\$6,590	\$14,470
Column totals per quarter	3	24	45	159	18	312	252	312				
Total Cost:	\$750	\$4,560	\$7,650	\$20,670	\$2,214	\$42,432	\$3,780	\$4,368	\$90,234	\$90,234	\$59,755	\$149,989

Notes:

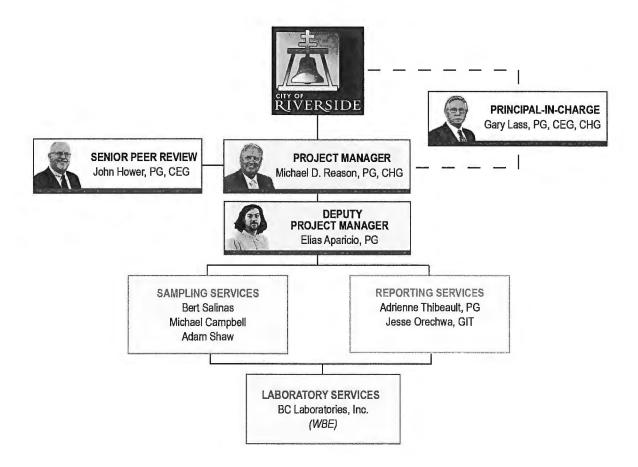
- 1) Project costs include sampling and analyses of 13 groundwater samples and 8 surface water samples per semiannual monitoring event, and 1 landfill gas condensate sample collected per year.
- 2) Project costs include a five-year constituents of concern (COC) monitoring event during the fourth quarter 2021.

EXHIBIT "C" KEY PERSONNEL



Company Personnel

For the TL Groundwater Monitoring and Reporting Project, GLA has assembled a highly qualified and integrated technical staff with extensive experience in providing the same types requested in the City's RFP. In fact, all of our proposed project personnel have provided these same services for the City at the TL, and as a result, there is no learning curve or training required to begin this project. The following Organizational Chart outlines our proposed project team, including our subcontractors.



Subconsultant:

BC Laboratories, Inc. (BC) - BC will perform the chemical analyses of groundwater, surface water, and condensate samples for the routine landfill environmental monitoring that may be required for this project. BC is a full-service, State certified environmental laboratory and a disadvantaged business enterprise that has been in business for 60 years. BC has completed environmental analytical testing for hundreds of municipal solid waste facilities and has a 20+ year working relationship with GLA.



By utilizing the same group of professionals who have provided these services to the City during the most recent contract term, GLA can assure the City that our team members understand the site, the site-specific regulations governing water quality monitoring and reporting, the regulatory personnel who review the reports and their concerns regarding the TL and the required technical monitoring reports, and the City's personnel and their concerns for this program.

Qualifications of our proposed Team members are summarized in the following table, followed by biographies for our Key Staff and resumes of all personnel are included in Appendix A.

Team Member	Role	Years of Experience	Education	Certification
Gary Lass	Principal-in-	41	MS, Geochemistry	PG, CEG, CHG
	Charge		BS, Geology	
Mike Reason	Project	29	MS, Geology	PG, CHG
	Manager		BS, Geology	
Elias Aparicio	Deputy Project	9	BS, Geology	PG
	Manager			
John Hower	Senior Peer	30	BS, Geology	PG, CEG
	Review			
Adrienne	Reporting	14	BS, Geology	PG
Thibeault				
Jesse Orechwa	Reporting	6	BA, Geology	GIT
Bert Salinas	Sampling	19		Nielsen School
Michael	Sampling	29	BS, Civil Engineering	Nielsen School
Campbell				
Adam Shaw	Sampling	12	BS, Environmental	Nielsen School
			Science	

Key Staff Bios

Gary Lass, PG, CEG, CHG | Principal-in-Charge | (909) 626 - 2232

Mr. Lass, President of GLA, has over 40 years of experience managing a full range of geotechnical, hydrogeologic, and environmental investigation and construction projects. He has extensive experience with all aspects of landfill siting, expansion, design, permitting, construction, operations, monitoring and closure. Mr. Lass has acted as Principal-in-Charge, and/or Project Manager for projects at numerous landfill sites related to geologic and hydrogeologic characterizations, Evaluation Monitoring Programs (EMPs), Corrective Action Programs (CAPs), and site closure. In addition, Mr. Lass has been involved in alternative final cover design and construction since 1986 when he participated in the closure of the BKK hazardous waste site. Mr. Lass is also a specialist in Title 27 compliance and is responsible for development of in-house statistical computer programs to respond to the regulatory requirements to evaluate groundwater quality data.



Michael Reason, PG, CHG | Project Manager | (909) 772 - 4348

Mr. Reason is a California Certified Hydrogeologist with 29 years of experience in geologic and hydrogeologic investigations. His expertise includes providing technical support and project management oversight on numerous water quality monitoring and reporting programs (M&RPs) and groundwater well construction projects with an emphasis on municipal landfills in California. Mr. Reason also is experienced with developing evaluation monitoring and corrective action programs, and preparing closure reports for municipal solid waste landfills, and most recently he has been responsible for overseeing monitoring and reporting programs at 35 landfills within California.

Elias Aparicio, PG | Deputy Project Manager | (909) 747 - 5874

Mr. Aparicio has nine years of experience as a Project Geologist. Mr. Aparicio's primary duties include: writing water quality monitoring reports, geotechnical borehole logging, compaction testing, field construction-observation, leachate remediation system monitoring and maintenance. In addition, Mr. Aparicio has been an integral team member of Geo-Logic Associates' wildfire debris removal project team.

John Hower, PG, CEG | Senior Peer Reviewer | (909) 626 - 2282

Mr. Hower is a Certified Engineering Geologist with over 30 years of experience in geology, engineering geology, landfill design, water quality data analysis, and construction quality assurance. He manages quarterly, semi-annual and annual groundwater monitoring and evaluation for solid waste landfills as well as liner and cover projects, groundwater corrective action programs and the full range of solid waste programs from siting to closure. His strong knowledge of state and federal solid waste regulations serves to assist his clients to comply with current regulations.