

## **AGREEMENT FOR SERVICES OF INDEPENDENT CONTRACTOR**

**THIS AGREEMENT** (hereafter Agreement) is made by and between the County of Santa Barbara, a political subdivision of the State of California (hereafter COUNTY) and Geosyntec Consultants with an address at 924 Anacapa Street, Suite 4A, Santa Barbara, California 93101 (hereafter CONTRACTOR) wherein CONTRACTOR agrees to provide and COUNTY agrees to accept the services specified herein.

**WHEREAS**, CONTRACTOR represents that it is specially trained, skilled, experienced, and competent to perform the special services required by COUNTY and COUNTY desires to retain the services of CONTRACTOR pursuant to the terms, covenants, and conditions herein set forth;

**NOW, THEREFORE**, in consideration of the mutual covenants and conditions contained herein, the parties agree as follows:

### **1. DESIGNATED REPRESENTATIVE**

Travis Spier at phone number 805-681-5626 is the representative of COUNTY and will administer this Agreement for and on behalf of COUNTY. Brian Hitchens at phone number 858-716-2913 is the authorized representative for CONTRACTOR. Changes in designated representatives shall be made only after advance written notice to the other party.

### **2. NOTICES**

Any notice or consent required or permitted to be given under this Agreement shall be given to the respective parties in writing, by personal delivery or facsimile, or with postage prepaid by first class mail, registered or certified mail, or express courier service, as follows:

To COUNTY:                      Travis Spier, Operations Manager  
County of Santa Barbara, Public Works Department  
Resource Recovery & Waste Management Division  
4430 Calle Real, Santa Barbara, CA 93110  
Phone: (805) 681-5626

To CONTRACTOR:                Brian Hitchens, Principal  
Geosyntec Consultants  
13400 Sabre Springs Parkway, Suite 135, San Diego, CA 92128  
Phone: (858) 716-2913

or at such other address or to such other person that the parties may from time to time designate in accordance with this Notices section. If sent by first class mail, notices and consents under this section shall be deemed to be received five (5) days following their deposit in the U.S. mail. This Notices section shall not be construed as meaning that either party agrees to service of process except as required by applicable law.

### **3. SCOPE OF SERVICES**

CONTRACTOR agrees to provide services to COUNTY in accordance with EXHIBIT A attached hereto and incorporated herein by reference.

**4. TERM**

CONTRACTOR shall commence performance on April 5, 2023 and end performance upon completion, but no later than December 31, 2023 unless otherwise directed by COUNTY or unless earlier terminated.

**5. COMPENSATION OF CONTRACTOR**

In full consideration for CONTRACTOR's services, CONTRACTOR shall be paid for performance under this Agreement in accordance with the terms of EXHIBIT B attached hereto and incorporated herein by reference. Billing shall be made by invoice, which shall include the contract number assigned by COUNTY and which is delivered to the address given in Section 2 NOTICES above following completion of the increments identified on EXHIBIT B. Unless otherwise specified on EXHIBIT B, payment shall be net thirty (30) days from presentation of invoice.

**6. INDEPENDENT CONTRACTOR**

It is mutually understood and agreed that CONTRACTOR (including any and all of its officers, agents, and employees), shall perform all of its services under this Agreement as an independent contractor as to COUNTY and not as an officer, agent, servant, employee, joint venturer, partner, or associate of COUNTY. Furthermore, COUNTY shall have no right to control, supervise, or direct the manner or method by which CONTRACTOR shall perform its work and function. However, COUNTY shall retain the right to administer this Agreement so as to verify that CONTRACTOR is performing its obligations in accordance with the terms and conditions hereof. CONTRACTOR understands and acknowledges that it shall not be entitled to any of the benefits of a COUNTY employee, including but not limited to vacation, sick leave, administrative leave, health insurance, disability insurance, retirement, unemployment insurance, workers' compensation and protection of tenure. CONTRACTOR shall be solely liable and responsible for providing to, or on behalf of, its employees all legally-required employee benefits. In addition, CONTRACTOR shall be solely responsible and save COUNTY harmless from all matters relating to payment of CONTRACTOR's employees, including compliance with Social Security withholding and all other regulations governing such matters. It is acknowledged that during the term of this Agreement, CONTRACTOR may be providing services to others unrelated to the COUNTY or to this Agreement.

**7. STANDARD OF PERFORMANCE**

CONTRACTOR represents that it has the skills, expertise, and licenses/permits necessary to perform the services required under this Agreement. Accordingly, CONTRACTOR shall perform all such services in the manner and according to the standards observed by a competent practitioner of the same profession in which CONTRACTOR is engaged. All products of whatsoever nature, which CONTRACTOR delivers to COUNTY pursuant to this Agreement, shall be prepared in a first class and workmanlike manner and shall conform to the standards of quality normally observed by a person practicing in CONTRACTOR's profession. CONTRACTOR shall correct or revise any errors or omissions, at COUNTY'S request without additional compensation. Permits and/or licenses shall be obtained and maintained by CONTRACTOR without additional compensation.

**8. DEBARMENT AND SUSPENSION**

CONTRACTOR certifies to COUNTY that it and its employees and principals are not debarred, suspended, or otherwise excluded from or ineligible for, participation in federal, state, or county government contracts. CONTRACTOR certifies that it shall not contract with a subcontractor that is so debarred or suspended.

**9. TAXES**

CONTRACTOR shall pay all taxes, levies, duties, and assessments of every nature due in connection with any work under this Agreement and shall make any and all payroll deductions required by law. COUNTY shall not be responsible for paying any taxes on CONTRACTOR's behalf, and should COUNTY be required to do so by state, federal, or local taxing agencies, CONTRACTOR agrees to promptly reimburse COUNTY for the full value of such paid taxes plus

interest and penalty, if any. These taxes shall include, but not be limited to, the following: FICA (Social Security), unemployment insurance contributions, income tax, disability insurance, and workers' compensation insurance.

**10. CONFLICT OF INTEREST**

CONTRACTOR covenants that CONTRACTOR presently has no employment or interest and shall not acquire any employment or interest, direct or indirect, including any interest in any business, property, or source of income, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement. CONTRACTOR further covenants that in the performance of this Agreement, no person having any such interest shall be employed by CONTRACTOR. CONTRACTOR must promptly disclose to COUNTY, in writing, any potential conflict of interest. COUNTY retains the right to waive a conflict of interest disclosed by CONTRACTOR if COUNTY determines it to be immaterial, and such waiver is only effective if provided by COUNTY to CONTRACTOR in writing.

**11. OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY**

COUNTY shall be the owner of the following items incidental to this Agreement upon production, whether or not completed: all data collected, all documents of any type whatsoever, all photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials, and any material necessary for the practical use of such items, from the time of collection and/or production whether or not performance under this Agreement is completed or terminated prior to completion. CONTRACTOR shall not release any of such items to other parties except after prior written approval of COUNTY.

Unless otherwise specified in Exhibit A, CONTRACTOR hereby assigns to COUNTY all copyright, patent, and other intellectual property and proprietary rights to all data, documents, reports, photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials prepared or provided by CONTRACTOR pursuant to this Agreement (collectively referred to as "Copyrightable Works and Inventions"). COUNTY shall have the unrestricted authority to copy, adapt, perform, display, publish, disclose, distribute, create derivative works from, and otherwise use in whole or in part, any Copyrightable Works and Inventions. CONTRACTOR agrees to take such actions and execute and deliver such documents as may be needed to validate, protect and confirm the rights and assignments provided hereunder. CONTRACTOR warrants that any Copyrightable Works and Inventions and other items provided under this Agreement will not infringe upon any intellectual property or proprietary rights of any third party. CONTRACTOR at its own expense shall defend, indemnify, and hold harmless COUNTY against any claim that any Copyrightable Works or Inventions or other items provided by CONTRACTOR hereunder infringe upon intellectual or other proprietary rights of a third party, and CONTRACTOR shall pay any damages, costs, settlement amounts, and fees (including attorneys' fees) that may be incurred by COUNTY in connection with any such claims. This Ownership of Documents and Intellectual Property provision shall survive expiration or termination of this Agreement.

**12. NO PUBLICITY OR ENDORSEMENT**

CONTRACTOR shall not use COUNTY's name or logo or any variation of such name or logo in any publicity, advertising or promotional materials. CONTRACTOR shall not use COUNTY's name or logo in any manner that would give the appearance that the COUNTY is endorsing CONTRACTOR. CONTRACTOR shall not in any way contract on behalf of or in the name of COUNTY. CONTRACTOR shall not release any informational pamphlets, notices, press releases, research reports, or similar public notices concerning the COUNTY or its projects, without obtaining the prior written approval of COUNTY.

**13. COUNTY PROPERTY AND INFORMATION**

All of COUNTY's property, documents, and information provided for CONTRACTOR's use in connection with the services shall remain COUNTY's property, and CONTRACTOR shall return any such items whenever requested by COUNTY and whenever required according to the Termination section of this Agreement. CONTRACTOR may use such

items only in connection with providing the services. CONTRACTOR shall not disseminate any COUNTY property, documents, or information without COUNTY's prior written consent.

**14. RECORDS, AUDIT, AND REVIEW**

CONTRACTOR shall keep such business records pursuant to this Agreement as would be kept by a reasonably prudent practitioner of CONTRACTOR's profession and shall maintain such records for at least four (4) years following the termination of this Agreement. All accounting records shall be kept in accordance with generally accepted accounting principles. COUNTY shall have the right to audit and review all such documents and records at any time during CONTRACTOR's regular business hours or upon reasonable notice. In addition, if this Agreement exceeds ten thousand dollars (\$10,000.00), CONTRACTOR shall be subject to the examination and audit of the California State Auditor, at the request of the COUNTY or as part of any audit of the COUNTY, for a period of three (3) years after final payment under the Agreement (Cal. Govt. Code Section 8546.7). CONTRACTOR shall participate in any audits and reviews, whether by COUNTY or the State, at no charge to COUNTY.

If federal, state or COUNTY audit exceptions are made relating to this Agreement, CONTRACTOR shall reimburse all costs incurred by federal, state, and/or COUNTY governments associated with defending against the audit exceptions or performing any audits or follow-up audits, including but not limited to: audit fees, court costs, attorneys' fees based upon a reasonable hourly amount for attorneys in the community, travel costs, penalty assessments and all other costs of whatever nature. Immediately upon notification from COUNTY, CONTRACTOR shall reimburse the amount of the audit exceptions and any other related costs directly to COUNTY as specified by COUNTY in the notification.

**15. INDEMNIFICATION AND INSURANCE**

CONTRACTOR agrees to the indemnification and insurance provisions as set forth in EXHIBIT C attached hereto and incorporated herein by reference.

**16. NONDISCRIMINATION**

COUNTY hereby notifies CONTRACTOR that COUNTY's Unlawful Discrimination Ordinance (Article XIII of Chapter 2 of the Santa Barbara County Code) applies to this Agreement and is incorporated herein by this reference with the same force and effect as if the ordinance were specifically set out herein and CONTRACTOR agrees to comply with said ordinance.

**17. NONEXCLUSIVE AGREEMENT**

CONTRACTOR understands that this is not an exclusive Agreement and that COUNTY shall have the right to negotiate with and enter into contracts with others providing the same or similar services as those provided by CONTRACTOR as the COUNTY desires.

**18. NON-ASSIGNMENT**

CONTRACTOR shall not assign, transfer or subcontract this Agreement or any of its rights or obligations under this Agreement without the prior written consent of COUNTY and any attempt to so assign, subcontract or transfer without such consent shall be void and without legal effect and shall constitute grounds for termination.

**19. TERMINATION**

- A. By COUNTY. COUNTY may, by written notice to CONTRACTOR, terminate this Agreement in whole or in part at any time, whether for COUNTY's convenience, for nonappropriation of funds, or because of the failure of CONTRACTOR to fulfill the obligations herein.



1. **For Convenience.** COUNTY may terminate this Agreement in whole or in part upon thirty (30) days written notice. During the thirty (30) day period, CONTRACTOR shall, as directed by COUNTY, wind down and cease its services as quickly and efficiently as reasonably possible, without performing unnecessary services or activities and by minimizing negative effects on COUNTY from such winding down and cessation of services.
  2. **For Nonappropriation of Funds.** Notwithstanding any other provision of this Agreement, in the event that no funds or insufficient funds are appropriated or budgeted by federal, state or COUNTY governments, or funds are not otherwise available for payments in the fiscal year(s) covered by the term of this Agreement, then COUNTY will notify CONTRACTOR of such occurrence and COUNTY may terminate or suspend this Agreement in whole or in part, with or without a prior notice period. Subsequent to termination of this Agreement under this provision, COUNTY shall have no obligation to make payments with regard to the remainder of the term.
  3. **For Cause.** Should CONTRACTOR default in the performance of this Agreement or materially breach any of its provisions, COUNTY may, at COUNTY's sole option, terminate or suspend this Agreement in whole or in part by written notice. Upon receipt of notice, CONTRACTOR shall immediately discontinue all services affected (unless the notice directs otherwise) and notify COUNTY as to the status of its performance. The date of termination shall be the date the notice is received by CONTRACTOR, unless the notice directs otherwise.
- B. **By CONTRACTOR.** Should COUNTY fail to pay CONTRACTOR all or any part of the payment set forth in EXHIBIT B, CONTRACTOR may, at CONTRACTOR's option terminate this Agreement if such failure is not remedied by COUNTY within thirty (30) days of written notice to COUNTY of such late payment.
- C. Upon termination, CONTRACTOR shall deliver to COUNTY all data, estimates, graphs, summaries, reports, and all other property, records, documents or papers as may have been accumulated or produced by CONTRACTOR in performing this Agreement, whether completed or in process, except such items as COUNTY may, by written permission, permit CONTRACTOR to retain. Notwithstanding any other payment provision of this Agreement, COUNTY shall pay CONTRACTOR for satisfactory services performed to the date of termination to include a prorated amount of compensation due hereunder less payments, if any, previously made. In no event shall CONTRACTOR be paid an amount in excess of the full price under this Agreement nor for profit on unperformed portions of service. CONTRACTOR shall furnish to COUNTY such financial information as in the judgment of COUNTY is necessary to determine the reasonable value of the services rendered by CONTRACTOR. In the event of a dispute as to the reasonable value of the services rendered by CONTRACTOR, the decision of COUNTY shall be final. The foregoing is cumulative and shall not affect any right or remedy which COUNTY may have in law or equity.

## 20. **SECTION HEADINGS**

The headings of the several sections, and any Table of Contents appended hereto, shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof.

## 21. **SEVERABILITY**

If any one or more of the provisions contained herein shall for any reason be held to be invalid, illegal or unenforceable in any respect, then such provision or provisions shall be deemed severable from the remaining provisions hereof, and such invalidity, illegality or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

**22. REMEDIES NOT EXCLUSIVE**

No remedy herein conferred upon or reserved to COUNTY is intended to be exclusive of any other remedy or remedies, and each and every such remedy, to the extent permitted by law, shall be cumulative and in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or otherwise.

**23. TIME IS OF THE ESSENCE**

Time is of the essence in this Agreement and each covenant and term is a condition herein.

**24. NO WAIVER OF DEFAULT**

No delay or omission of COUNTY to exercise any right or power arising upon the occurrence of any event of default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein; and every power and remedy given by this Agreement to COUNTY shall be exercised from time to time and as often as may be deemed expedient in the sole discretion of COUNTY.

**25. ENTIRE AGREEMENT AND AMENDMENT**

In conjunction with the matters considered herein, this Agreement contains the entire understanding and agreement of the parties and there have been no promises, representations, agreements, warranties or undertakings by any of the parties, either oral or written, of any character or nature hereafter binding except as set forth herein. This Agreement may be altered, amended or modified only by an instrument in writing, executed by the parties to this Agreement and by no other means. Each party waives their future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by any oral agreements, course of conduct, waiver or estoppel.

**26. SUCCESSORS AND ASSIGNS**

All representations, covenants and warranties set forth in this Agreement, by or on behalf of, or for the benefit of any or all of the parties hereto, shall be binding upon and inure to the benefit of such party, its successors and assigns.

**27. COMPLIANCE WITH LAW**

CONTRACTOR shall, at its sole cost and expense, comply with all County, State and Federal ordinances and statutes now in force or which may hereafter be in force with regard to this Agreement. The judgment of any court of competent jurisdiction, or the admission of CONTRACTOR in any action or proceeding against CONTRACTOR, whether COUNTY is a party thereto or not, that CONTRACTOR has violated any such ordinance or statute, shall be conclusive of that fact as between CONTRACTOR and COUNTY.

**28. CALIFORNIA LAW AND JURISDICTION**

This Agreement shall be governed by the laws of the State of California. Any litigation regarding this Agreement or its contents shall be filed in the County of Santa Barbara, if in state court, or in the federal district court nearest to Santa Barbara County, if in federal court.

**29. EXECUTION OF COUNTERPARTS**

This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the parties shall preserve undestroyed, shall together constitute one and the same instrument.

**30. AUTHORITY**

All signatories and parties to this Agreement warrant and represent that they have the power and authority to enter into this Agreement in the names, titles and capacities herein stated and on behalf of any entities, persons, or firms represented or purported to be represented by such entity(ies), person(s), or firm(s) and that all formal requirements necessary or required by any state and/or federal law in order to enter into this Agreement have been fully complied with. Furthermore, by entering into this Agreement, CONTRACTOR hereby warrants that it shall not have breached the terms or conditions of any other contract or agreement to which CONTRACTOR is obligated, which breach would have a material effect hereon.

**31. SURVIVAL**

All provisions of this Agreement which by their nature are intended to survive the termination or expiration of this Agreement shall survive such termination or expiration.

**32. PRECEDENCE**

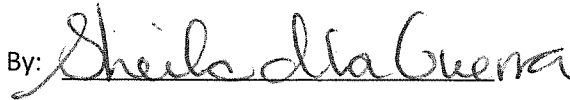
In the event of conflict between the provisions contained in the numbered sections of this Agreement and the provisions contained in the Exhibits, the provisions of the Exhibits shall prevail over those in the numbered sections.

Agreement for Services of Independent Contractor between the **County of Santa Barbara** and **Geosyntec Consultants**


**IN WITNESS WHEREOF**, the parties have executed this Agreement to be effective on the date executed by COUNTY.

**ATTEST:**

Mona Miyasato  
County Executive Officer  
Clerk of the Board

By:   
Deputy Clerk

**COUNTY OF SANTA BARBARA:**

By:   
Das Williams, Chair  
Board of Supervisors  
Date: 4-4-23

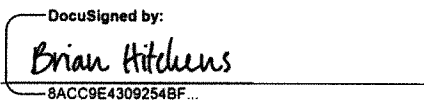
**RECOMMENDED FOR APPROVAL:**

PUBLIC WORKS DEPARTMENT

By:   
Scott McGolpin, Director  
Department Head

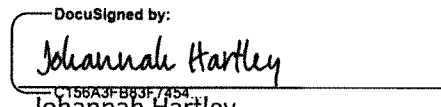
**CONTRACTOR:**

GEOSYNTEC CONSULTANTS

By:   
Authorized Representative  
Name: Brian Hitchens  
Title: Vice President

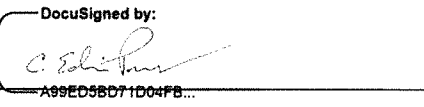
**APPROVED AS TO FORM:**

Rachel Van Mullem  
County Counsel

By:   
Johannah Hartley  
Deputy County Counsel

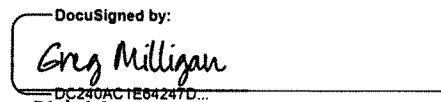
**APPROVED AS TO ACCOUNTING FORM:**

Betsy M. Schaffer, CPA  
Auditor-Controller

By:   
Deputy

**APPROVED AS TO FORM:**

Gregory Milligan, ARM  
Risk Management

By:   
Risk Management

**EXHIBIT A**

**STATEMENT OF WORK**

CONTRACTOR agrees to provide COUNTY engineering services as identified in the attached proposal dated February 9, 2023. CONTRACTOR agrees that work will only commence at the issuance of a written Notice to Proceed by the Public Works Director or Director's designee.

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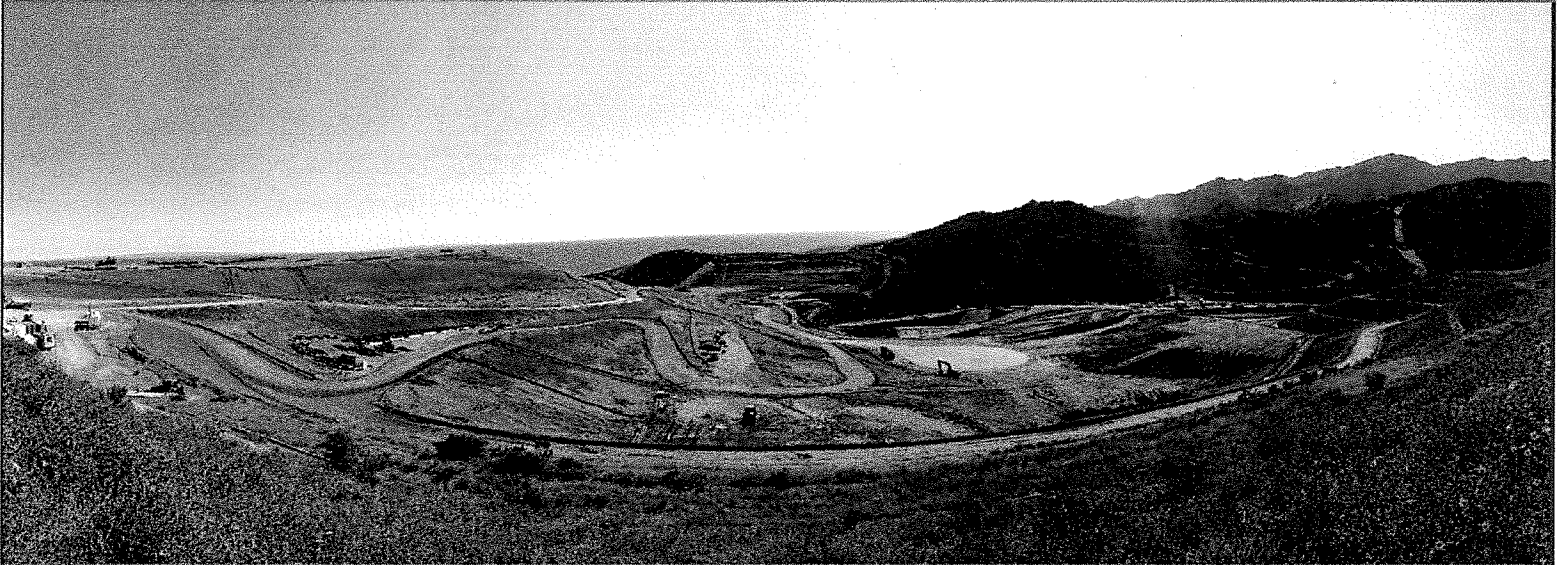
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# TECHNICAL PROPOSAL Construction Quality Assurance Services for Groundwater Protection System Phase IIIF Construction Project at the Tajiguas Sanitary Landfill

CONSTRUCTION PROJECT NO. 828396 | FEBRUARY 9, 2023



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PREPARED BY



PREPARED FOR



SANTA BARBARA COUNTY  
Resource Recovery &  
Waste Management Division  
*Innovative Environmental Solutions*





924 Anacapa Street, Suite 4A  
Santa Barbara, California 93101  
P 805 897 3800  
www.geosyntec.com

February 9, 2023

Ms. Jamie Reyes, Civil Engineer  
County of Santa Barbara, Public Works Department  
Resource Recovery and Waste Management Division  
130 E. Victoria Street, Suite 100  
Santa Barbara, California 93101

**RE: Construction Quality Assurance Services for  
Groundwater Protection System Phase IIIF  
Construction Project at the Tajiguas Sanitary Landfill**

Dear Ms. Reyes:

Geosyntec Consultants, Inc. (Geosyntec) is pleased to provide this proposal for Construction Quality Assurance (CQA) services in response to your Request for Proposal (RFP) issued by the Santa Barbara County Public Works Department, Resource Recovery and Waste Management Division (County) on January 19, 2023, for Project No. 828396.

Geosyntec is enthusiastic to continue working with the County on this groundwater protection system project, and we look forward to discussing our proposal with you further at your convenience.

Per the RFP requirements, we are respectfully submitting our proposal to the PlanetBids web address listed in the RFP. Additionally, as required by the RFP, our Cost Proposal was submitted separately electronically via the web address listed in the RFP.

We look forward to continuing our long and successful partnership with the County by committing our services and resources to this very important project. **As we have demonstrated in the past, we will do whatever it takes to meet the objectives of this project and satisfy the County and we will negotiate in good faith a project agreement with the County that reflects the agreed-upon term and conditions.**

Please feel free to contact Yonas Zemuy or Karthik Viswanathan at the contact numbers listed below if you have any questions, comments, or would like additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Yonas Zemuy", written over a horizontal line.

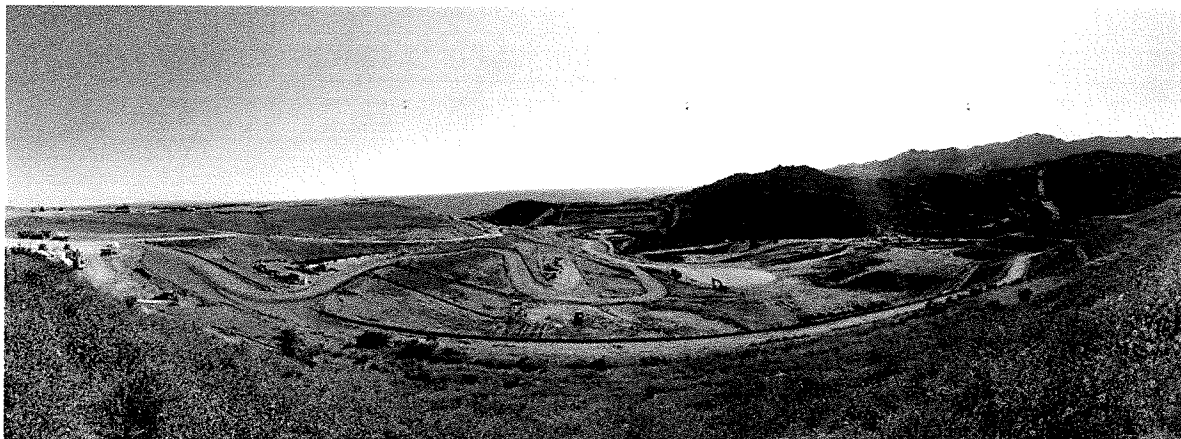
**Yonas Zemuy, P.E.**  
**Project Director/CQA Manager**  
Direct: (714) 465-1256  
E-mail: [yzemuy@geosyntec.com](mailto:yzemuy@geosyntec.com)

A handwritten signature in black ink, appearing to read "Karthik Viswanathan", written over a horizontal line.

**Karthik Viswanathan, EIT**  
**Project Professional/CQA Officer**  
Direct: (714) 465-1250  
E-mail: [kviswanathan@geosyntec.com](mailto:kviswanathan@geosyntec.com)



## 1. EXECUTIVE SUMMARY



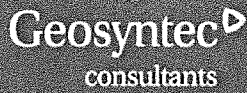
Building upon our project team's working knowledge and Construction Quality Assurance (CQA) experience at Tajiguas Landfill, Geosyntec Consultants is pleased to submit this proposal to provide Santa Barbara County (the County) with CQA Services for the Phase IIIF Groundwater Protection System Construction, Project Number 828396.

As demonstrated by our proposal, Geosyntec is an established and highly qualified consulting and engineering firm. Geosyntec's team is a uniquely qualified team of talented professionals to provide the Construction Quality Assurance (CQA) Services described in the Request for Proposal (RFP). As we have for over 38 years for our waste management clients, Geosyntec will continue to provide the County with in-depth expertise in landfill CQA services. Geosyntec's personnel, specifically those assigned for this project, have worked on numerous landfill projects in California, including landfills under the jurisdiction of the Central Coast Regional Water Quality Control Board (RWQCB) and have a solid reputation with the RWQCB and CalRecycle.

**Geosyntec also has long and successful working relationship with SWT Engineering Inc (SWT), the Design and Engineer of Record for Phase IIIF Groundwater Protection System Construction Project.** Geosyntec provided geotechnical and CQA services on several landfill expansion projects designed by SWT. **The successful historical collaboration between Geosyntec and SWT will benefit the County and contribute to the successful completion of this important project, saving the County cost and reducing potential delays.**

Geosyntec has provided multi-disciplined regulatory compliance, environmental, and geotechnical and civil engineering services to numerous governmental waste management agencies, including the Counties of Kern, Orange, Los Angeles, San Diego, San Bernardino, Riverside, and Santa Barbara, as well as private landfill operators such as Republic and Waste Management. In support of this project, as we have done in the past, Geosyntec commits to the County the following:





- Efficient Project Team with Relevant Experience on Similar Projects – Geosyntec is comprised of acknowledged experts who are committed to continue providing innovative cost-effective solutions to the County. For example, Geosyntec’s project personnel designed, provided CQA services and assisted our client in obtaining expedited regulatory approval for the first lined Cell (Module 2) at the Taft Recycling and Sanitary Landfill. Geosyntec personnel have relevant work experience and there will be no learning curve for Geosyntec’s project personnel supporting the County on this project.
- Established Regulatory Rapport – Geosyntec’s project personnel understand the Title 27 / Subtitle D regulatory requirements and have well-established working relationships with the relevant regulatory agencies, including the Central Coast, Central Valley and Lahontan RWQCBs, CalRecycle and the local AQMD. Geosyntec’s project personnel have developed excellent relationships with the relevant regional and state regulators. Geosyntec has an excellent track record for obtaining quick regulatory approvals for CQA reports including at the Tajiguas Landfill.
- Commitment of Employee Availability – The Geosyntec Team provides over 200 Southern California professionals available to support this project, with an additional staff of support employees available from across the nation if needed. Geosyntec assures staff continuity for the County’s project.
- Project Quality Assurance / Quality Control Program – To meet the County's expectations regarding project costs, schedules, and deliverables, the Geosyntec Team will maintain regular and open communication. Yonas Zemuy, P.E., the Project Director/CQA Manager, as he successfully demonstrated on numerous similar CQA and landfill projects, will be responsible for facilitating and controlling open communication and ensuring quality deliverables by:
  - Involving team members when preparing task proposals to comply with budgets and schedules;
  - Holding regular progress meetings and preparing progress reports;
  - Monitoring that budgets and milestones are met; and
  - Reviewing draft and final deliverables before submittal to the County for conformance with the scope of work, content, consistency, and overall quality.

Per the RFP’s requirement, Geosyntec’s primary contacts and office locations listed below

**Orange County Office**

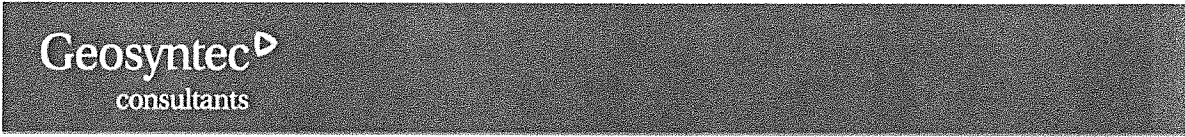
3530 Hyland Avenue, Suite 100  
Costa Mesa, CA 92626  
Phone: (714) 969-0800

**Santa Barbara Office**

924 Anacapa Street, Suite 4A  
Santa Barbara, CA 93101  
Phone: (805) 897-3800

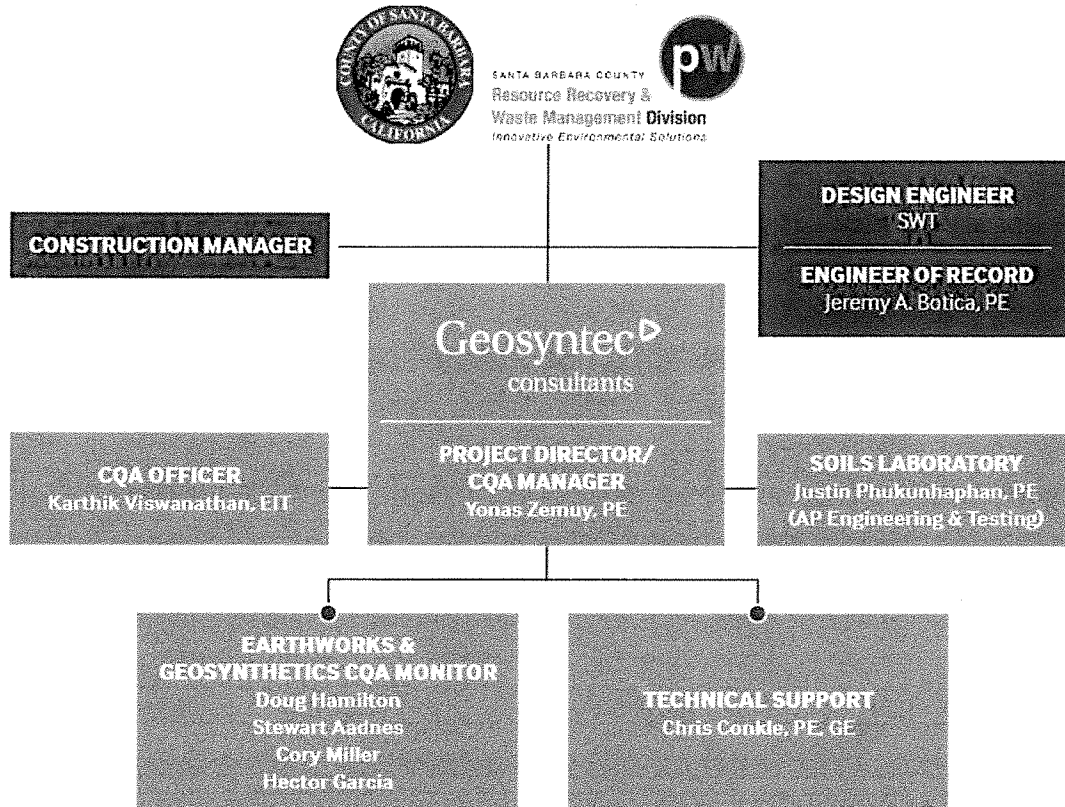
**Contacts:**

Karthik Viswanathan, CQA Officer  
Yonas Zemuy, Project Director/CQA Manager



## 2. PROJECT TEAM ORGANIZATION AND KEY PERSONNEL

The Geosyntec Team assembled for this contract is uniquely qualified to perform the CQA services required for successful implementation of the project objectives. Our team provides the County with reliability, site experience, added technical value, and depth of resources and site-specific experience. As we have done with past liner expansion projects at Tajiguas Landfill, we will continue to provide the County with the highest quality CQA service to meet potential needs for the Phase III F Groundwater Protection System. In this section and in the following organization chart, we present our project team member qualifications and their roles on the contract.





Geosyntec's Project Director and **CQA Project Manager will be Mr. Yonas Zemuy** a civil and geotechnical engineer with over 20 years of professional experience and licensed in the State of California. **Mr. Karthik Viswanathan**, a civil engineer with 5 years of local (Southern California) experience will serve as the CQA Officer for the project. In addition, and when necessary, **Mr. Chris Conkle, P.E., G.E.**, will serve as a technical advisor. Mr. Conkle served a leading role in the CQA management of six past groundwater protection projects at Tajiguas Landfill.

**Doug Hamilton will serve as Lead CQA Monitor** for the project, and will be assisted as needed by senior technicians, Stewart Aadnes, Cory Miller, and Hector Garcia. Stewart, Cory, and Hector have extensive experience with earthworks and geosynthetic monitoring at numerous sites and will serve as backup technicians to assist on the project as and if needed. The same CQA Manager, CQA Officer and Lead CQA Monitor(s) will participate in the project for the duration of the construction. Unless the project is significantly delayed, the individuals identified in this proposal will be the key personnel assigned to the project. We will not substitute personnel without prior approval of the County. The Geosyntec project team is summarized below. Detailed resumes are included as Attachment A at the end of this proposal.

### Key Personnel Bios



#### YONAS ZEMUY, PE, PROJECT DIRECTOR/CQA MANAGER

- Professional Engineer California No. C79713
- Geosyntec's leading technical expert in monocover design and permitting
- Landfill CQA for new liner systems, partial, and clean closures
- County waste management master planning
- Planning of landfill investigations
- Design of landfill liners and covers



#### KARTHIK VISWANATHAN, EIT, CQA OFFICER

- CQA for earthwork and liner components of development projects, dam rehabilitation, and municipal solid waste landfills
- Design drawings for construction
- Geotechnical stability analyses
- Evaluation of design reports and site/laboratory testing data



#### CHRIS CONKLE, PE, GE, TECHNICAL SUPPORT

- Professional Engineer California No. C70923; California GE No. 2926
- CQA Project Manager/Project Direction for last 6 liner expansion project at the Site
- Landfill CQA for new liner systems, partial, and clean closures
- Landfill engineering including liner interface shear strength, slope stability, and seismic performance
- Geotechnical engineering of landfills, landslides, foundation systems, earth retention systems, and embankments
- Civil engineering and hydrologic design

## Key Personnel Bios



### **DOUG HAMILTON, CQA MONITOR**

- Lead CQA Monitor for 3A, 3B, and 3E liner construction at Tajiguas
- Geosynthetics CQA monitoring of over 80 million ft<sup>2</sup> of geosynthetics
- 26 years of CQA monitoring experience related to earthworks and geosynthetics construction and 32 years of experience in landfill engineering field services



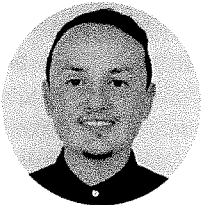
### **STEWART AADNES, CQA MONITOR**

- Construction Manager with over 22 years of construction experience
- Landfill engineering field services including construction and clean closure
- Remediation system O&M and LFG control system assessment and upgrades
- Monitored over 25 million ft<sup>2</sup> of geomembrane installation
- Served dual roles of CQA Manager and Construction Manager on several projects



### **CORY MILLER, CQA MONITOR**

- CQA Monitor for various geosynthetic installations
- Landfill gas collection and control system construction
- Contractor oversight and management on environmental remediation and enviro-civil construction projects
- Monitored over 10 million ft<sup>2</sup> of geomembrane installation



### **HECTOR GARCIA, CQA MONITOR**

- CQA Monitor for landfill construction - earthworks
- Field inspections and investigations
- Remediation oversight at contaminated sites
- Construction project management services

## 3. QUALIFICATION AND EXPERIENCE COMPETENCE

Founded as a landfill engineering firm, Geosyntec Consultants, Inc. has 88 offices in the continental United States and internationally. Geosyntec has over 38 years of local experience in the closure and post-closure maintenance, preparation of final fill plans, preparation of final cover design and CQA of hundreds of landfill expansions and closure projects. Our exceptional understanding of environmental regulations and application of leading-edge technology uniquely qualifies Geosyntec to support the County's Groundwater Protection System project.

Geosyntec has provided CQA during the construction of numerous similar projects at the Tajiguas Landfill, including seven previous groundwater protection system expansions (Phases 2A, 2B, 2C, 3A, 3B, 3C and 3E), Phase 3 Part 2 Partial Final Closure, as well as other improvement projects at the site (e.g., Out of Channel Basin and Leachate tank foundations). Geosyntec's staff worked on each of these projects all of which were completed on time and without construction related claims or delays. **Geosyntec's CQA**



reports have been readily approved by the Regional Water Quality Control Board without comment. The timely completion and approval of these reports has allowed the County to occupy the new phases of the groundwater protection system prior to the wet season in each case. **There's no learning curve for Geosyntec on this project.**

Geosyntec has successfully provided CQA services on similar projects with SWT Engineering serving as Design Engineer to the County. A summary of Geosyntec's previous experience at Tajiguas Landfill is provided in **Table 1** below.

**TABLE 1: CQA SERVICES AT TAJIGUAS LANDFILL**

Groundwater Protection System Phase	Date	Contractor	Geosynthetics Installer	Designer	Geotechnical Engineer
2A	2008	Raminha	Great Basin	SWT	Geosyntec
2B	2009	Whitaker	ECA	SWT	Geosyntec
In Channel/Out of Channel Basin	2010-2011	R. Burke Construction	-	SWT	Geosyntec
2C	2011	Papich	D&E	SWT	Geosyntec
3A	2012	Raminha	D&E	SWT	Geosyntec
3B	2014	Papich	D&E	SWT	Geosyntec
3C	2018	Whitaker	ECA	SWT	Geosyntec
3E	2019-2020	Whitaker	D&E	SWT	Geosyntec







## Project References

Provided in **Table 2** is a list of client references who are familiar with Geosyntec's recent Southern California CQA experience. Each will attest to the qualifications of our firm and our personnel.

**TABLE 2: PROJECT REFERENCES**

Project	Client	Value (\$)	Contact Information
Tajiguas Sanitary Landfill Liner Expansion CQA Services Phase IIIC	County of Santa Barbara Resource Recovery and Waste Management	\$130,000	<b>Todd Curtis</b> 805-882-3621 tcurtis@cosbpw.net
Tajiguas Sanitary Landfill Phase IIIE Groundwater Protection System	County of Santa Barbara Resource Recovery and Waste Management	\$196,625	<b>Travis Spier, P.E.</b> 805-681-5626 tspier@countyofsb.org
Savage Canyon Landfill Phase 3A Construction Quality Assurance & Engineering Support Services	City of Whittier	\$500,000	<b>Raul Flore</b> 562-567-9525 rflore@cityofwhittier.org
Sunshine Canyon Landfill Ultimate Front Entrance Phases I & II Construction Quality Assurance Services	Republic Services, Inc.	\$627,000	<b>Kate Downey</b> 818-362-2154 kdowney@republicservices.com
Waste Management Unit 2 Partial Final Closure, Prima Descheca Landfill	OC Waste and Recycling	\$839,109	<b>David Tieu</b> 949-728-3047 David.Tieu@ocpw.ocgov.com
Taft Recycling and Sanitary Landfill	Kern County Waste Management	\$450,000	<b>Bryon Smith – Retired</b> 661-862-8908 smithb@co.kern.ca.us
Olinda Alpha Landfill	OC Waste and Recycling	~\$500,000	<b>David Wong</b> 714-993-0608 david.wong@ocwr.ocgov.com

Detail description of the projects listed in Table 2 is included in the following section titled Relevant Project Experience.

## Relevant Project Experience

### **Tajiguas Sanitary Landfill Liner Expansion CQA Services, Santa Barbara County, California. Santa Barbara County Public Works Department, Resource Recovery and Waste Management Division. (2008-2020)**

Geosyntec has provided landfill liner CQA services at Tajiguas Landfill for over more than 12 years during the construction of Phases 2A, 2B, 2C, 3A, 3B, 3C and 3E of the groundwater protection system. In total, over 25 acres of composite landfill liner was installed. Both Geosynthetic Clay Liner (GCL) and Compacted Clay Liner (CCL) were utilized. During each project, Geosyntec documented the geosynthetic products used by



the contractor including geotextile, GCL, geomembrane, and geocomposite products. Geosyntec coordinated conformance testing of the products to ensure that the materials installed by the contractor met the project specifications. During geomembrane seaming, Geosyntec field personnel conducted nondestructive and



Geomembrane placed along an engineered fill berm during construction of Phase IIIC.

destructive testing of the contractor's work to ensure high quality and environmentally safe products were installed. In areas where low-permeability CCL was installed, Geosyntec evaluated and tested the fill to ensure it was placed at the proper moisture content, density, and that the soil had the proper index properties. These activities also included coordination of a demonstration fill, which allowed the contractor and Geosyntec to find an acceptable means of construction before major construction activities began. This approach allowed the project to proceed smoothly. The above field testing and observation activities, which were coordinated to meet the requirements of Central Coast Regional Water Quality Control Board (RWQCB), were documented in a CQA Report for review by the County of Santa Barbara and the RWQCB. Our report for each phase was readily approved by the RWQCB and we maintain an excellent working relationship with the RWQCB both through our CQA work on site and our compliance monitoring work on behalf of the County which is described below.

All of the liner projects over this period were completed on time and without construction-related claims. Geosyntec's CQA reports have typically been received by the RWQCB within weeks of completion of construction. This expedited reporting allowed for quick regulatory review and occupancy of the cell by the County on schedule.

**In each of the last 4 phases, an approval to occupy the cell was received within 1 month of the completion of liner system construction.** In the case of Phase IIIB, approval to occupy the cell was issued by the RWQCB prior to the completion of the cell based on Geosyntec's relationship with the RWQCB and the commitment which we fulfilled to deliver the CQA report within two weeks of the completion of construction.

**TABLE 3: TIMELY COMPLETION OF CQA SERVICES AT TAJIGUAS LANDFILL**

Groundwater Protection System Phase	Date of Completion of Liner System Construction	Date of Geosyntec Request for Conditional Approval	Date of Submittal of Final CQA Report	Approval to occupy Cell Granted by RWQCB	Time from Completion of Liner System to Approval to Occupy by RWQCB
IIIA	8-27-12	-	9-10-12	9-24-12	28 days
IIIB	10-13-14	10-6-14	10-21-14	10-9-14	0 days
IIIC	7-10-18	7-9-18	9-27-18*	7-17-18	7 days
IIIE	2-7-20	2-25-20	5-12-20*	2-28-20	3 days

\*Draft CQA for IIIC was issued on 7-27-18, draft CQA for IIIE was issued on 3-2-20. Final submittal withheld due to as-built survey.

### **Tajiguas Sanitary Landfill Phase 3 Part 2 Partial Final Closure, Santa Barbara County, California (2020)**

Geosyntec provided CQA services for 6 acres of new cover system constructed over a portion of the unlined waste disposal area. The cover system consisted of (from bottom to top) foundation soil layer, LLDPE geomembrane, cushion geotextile, and Protective Cover Soil (PCS). The construction scope included installation of LFG collector pipes, geosynthetics installation, anchor trench backfills, and PCS placement.

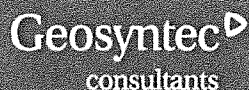
Our earthwork scope of services included nuke gauge testing on the foundation fill layer, trench backfill, and PCS, drive cylinder test on PCS, and collecting soil samples for laboratory testing. Our geosynthetics scope of services included reviewing Manufacturer Quality Control documentation and verifying it complies with project documents; monitoring and documenting deployment, installation, and repair of geosynthetics (geomembrane + geotextile), seaming of geomembrane, on-site destructive testing of trial seams, non-destructive testing of production seams; selecting locations to obtain samples of geomembrane for destructive laboratory testing; reviewing lab test results for compliance with project specifications; monitoring and documenting repairs made to geomembrane production seams at the locations of destructive seam tests.

This is another example of a project where we worked with SWT (engineer-on-record) and its construction took place concurrently with construction of Phase IIIE Groundwater Protection System, which is a testimony to our experience of conducting project construction with minimal interference to other work ongoing at the site.

### **Sunshine Canyon City/County Landfill Closure Turf CQA – Sylmar, California (2018)**

Republic Services, the owner and operator of Sunshine Canyon Landfill, contracted Geosyntec to provide construction quality assurance (CQA) services during the installation a temporary cover system along an approximately 4-acre waste fill slope at this active Class III landfill. The temporary cover was comprised of a 50-mil LLDPE structured geomembrane installed over prepared subgrade soil and overlain by closure turf with infill sand placed between the synthetic tufts of the turf. Geosyntec provided an





Installation crew spraying infill sand into the newly installed closure turf.

engineering technician onsite full-time for the duration of the project. Prior to geomembrane deployment, the Geosyntec CQA technician observed and documented subgrade preparation and performed nuclear density testing to evaluate compliance with specifications requirements. During geosynthetic installation, the onsite technician confirmed material deliveries, observed geomembrane

and turf placement, and documented seaming and testing activities. Throughout the project, the Geosyntec project manager attended weekly construction status meetings, reviewed contractor submittals, and maintained communication with the client, the field staff, and the design engineer. Additionally, Geosyntec provided conformance testing for the subgrade soil and geosynthetic materials. Upon completion of the project, Geosyntec prepared a comprehensive CQA Report describing the services performed, presenting the results of all required testing, and certifying that the project was constructed in general conformance with the project documents.

### **Savage Canyon Landfill Phase 3A CQA & Engineering Support - Whittier, California (2018-2019)**



Liner system installed as part of the Phase 3A Construction.

Geosyntec Consultants, Inc. provided Construction Quality Assurance (CQA) and Engineering Support services for the approximately 4-acre Phase 3A construction project at Savage Canyon Landfill, an active Class III landfill in Whittier, California. As a part of the CQA services, Geosyntec monitored the construction and installation of mass excavation and unclassified fill, geosynthetics, leachate collection and

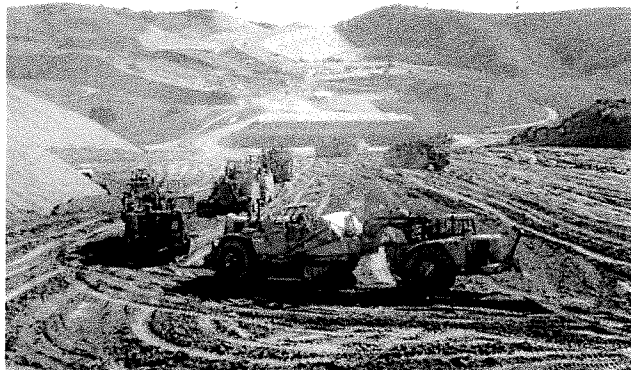
removal system, surface water management system, perimeter access road, and the re-abandonment of oil wells.

Geosyntec's CQA program included review of contractor submittals and corresponding responses; monitoring installation of earthworks, leachate collection and removal system, surface water management system, access road, and geosynthetics; performing conformance tests for earthworks and geosynthetics; review of design clarifications and modifications; monitoring the re-abandonment of existing oil wells; and performing in-grade geological mapping. In addition, Geosyntec prepared the final CQA report documenting construction of the Phase 3A project.



## **Waste Management Unit 2 (WMU2) Partial Final Closure, Closure Construction Quality Assurance - Orange County, California (2014-2016)**

The WMU2 closure was necessitated by the construction of a highway through the Prima Deshecha Landfill. This 3.6-mile link between San Clemente and San Juan Capistrano is the largest completed project in Orange County Public Works history. The roadway crosses a portion of landfill where as much as 120' of waste had previously been placed. Because of concerns with excessive settlements of the roadway and long-term



maintenance, waste under the alignment was excavated as part of a partial final closure of the unit. The excavation and relocation of approximately 850,000 yd<sup>3</sup> of waste is one of the largest ever completed. The remaining in-place waste adjacent to the alignment was closed with an approximately 14-acre composite liner system. The composite liner system consists of (from top to bottom): 2' thick layer of protective cover soil, a 300-mil geocomposite cushion layer, a 60-mil double-sided textured LLDPE geomembrane, a 300-mil geocomposite cushion layer, and a 2' thick foundation soil layer. In addition to serving as the geotechnical engineer for the larger roadway project and the designer of the WMU2 waste excavation, Geosyntec provided construction quality assurance (CQA) services during waste excavation, subgrade preparation, foundation soil layer construction, geosynthetics installation, and protective cover soil placement. The closure construction posed many challenging and unique conditions including the construction of a foundation layer over waste on a 1.5:1 (H:V) slope up to 120' high with deployment of three layers of geosynthetics over this same slope.

Additionally, uncertainties regarding the actual base of waste excavation dictated that adjustments to the closure design were made during construction including the height of lined slopes and location of drainage. The waste excavation and cover system installation were completed on schedule, without impact to the highway construction schedule.

## **Taft Recycling & Sanitary Landfill Module 2 Expansion - Kern County, California (2014-2015)**

Module 2 expansion at Taft Recycling and Sanitary Landfill, (Taft RSLF) encompassed approximately 10 acres with over 1,000,000 yd<sup>3</sup> of air space capacity. Geosyntec provided design and construction quality assurance (CQA) services to Kern County Public Works Department (KCPWD). As part of the CQA services, Geosyntec performed earthworks monitoring and testing, geosynthetics documentation and installation observation, observation of non-destructive and destructive geosynthetic testing, and observation of

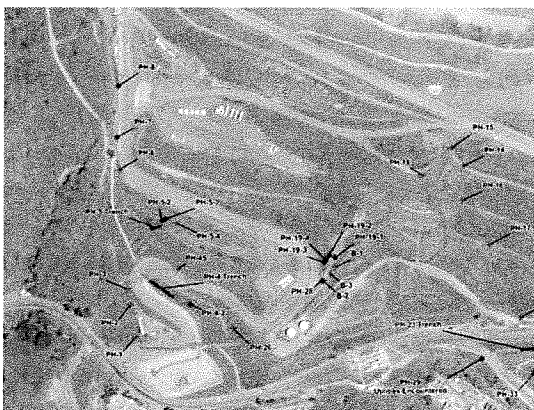


CQA during liner installation at Taft Landfill.

leachate collection and removal systems installation. Geosyntec's CQA field testing activities included compaction testing and visual classification of fill materials. Throughout the construction process, Geosyntec worked with the contractor to verify qualification testing and obtained conformance samples for laboratory testing and characterization. Geosyntec's CQA report was approved by the Central

Valley RWQCB within a very short period and with no major comments. Geosyntec also provided construction support services to KCWMD on an as-needed basis. Geosyntec's other major project contributions included a Subtitle D "alternative" liner demonstration which was readily approved by the Central Valley RWQCB and granted an exemption for subgrade material specification, saving KCPWD millions of dollars over the life of the project. Geosyntec's innovative solutions to address challenging site conditions and regulatory requirements on this project have provided significant long-term cost savings to Kern County.

### **Olinda Alpha Landfill Phase 1 & 2 Partial Final Closure - Orange County, California (2018)**



Phase 1 and 2 Partial Final Closures (PFC) at the Olinda Alpha Landfill (OAL) was constructed using an ET cover. The project was designed to be constructed using owner-supplied material from an on-site soil stockpile, which eliminated the need for soil importation and resulted in large savings (estimated in the millions of dollars) for OC Waste & Recycling. Prior to construction of the ET cover, Geosyntec performed geotechnical field investigation, collected soil samples for laboratory testing and prepared a landfill cover model in support of the

ET final cover system design. Results of the field investigation, laboratory testing, and computer modeling tasks were used to prepare an Alternative Final Cover (AFC) Report. The (AFC) report was reviewed and approved by the regional Water Quality Control Board (RWQCB) and the Local enforcement Agency (LEA) of CalRecycle with no comments. In support of the Phase 1 and 2 PFCs at the OAL, Geosyntec also delineated the limits of the existing waste within Phase 1 and 2 PFC areas. Additionally, Geosyntec prepared a comprehensive Construction Quality Assurance (CQA) plan for the ET cover and miscellaneous civil improvements at the site.



#### 4. PROPOSED METHOD TO ACCOMPLISH THE SERVICES

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Geosyntec's approach to providing CQA services has yielded success in previous projects at the site. We have found that a construction team that communicates frequently and openly is a successful team. Geosyntec's approach to this project will be similar to those successfully completed projects while tailored to the unique aspects of this groundwater protection system. Geosyntec understands the importance of incorporating the specified materials and following the proper installation procedures when constructing landfill liner system. Our team is adept at providing thorough review of submittals and well-documented observation during construction. Geosyntec's CQA Manager and CQA Officer will be actively involved in all aspects of the project. Geosyntec's experienced CQA monitors will resolve construction related issues in the field quickly, notifying County personnel and CM immediately when their intervention is needed. Geosyntec's approach to these services and communication is exemplified by our close working relationships with the County's staff and the project design engineer, as well as with contractors, liner installers, and other subcontractors who are frequently involved with projects at Tajiguas.

Based on a review of the RFP document and CQA plan for the Phase IIIIF Groundwater Protection System, as well as our over 38-year history of providing these services for landfill sites throughout Southern California, Geosyntec prepared the following approach to accomplish the scope of work described in the RFP. Geosyntec has organized the scope of work into the following tasks:

- Task 1: Pre-Construction Work**
- Task 2: Participation in Meetings**
- Task 3: Construction Observation Services**
- Task 4: Laboratory Testing**
- Task 5: Preparation of CQA Report**
- Task 6: Project Management**
- Task 7: Engineering Support**

##### **Task 1: Pre-Construction Work**

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This task will include:

- Review of relevant design documents, drawings, project specifications, and CQA plan.
- Preparation of a project specific Health & Safety Plan.
- Review of liner manufacturer/subcontractor certifications and qualifications.



## **Task 2: Participation in Meetings**

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This task includes participation in:

- A pre-construction meeting. One full-day on-site meeting. This meeting will be attended by CQA Manager, CQA Officer, and the Lead CQA Monitor.
- Weekly progress meetings: Up to 2 hours per week over 45 working days attended by the CQA Manager and CQA Officer (virtually) and the lead CQA Monitor (in person).
- Special meetings (as required to discuss problems or deficiencies): Up to 2 meetings, 2 hours each. Special meetings will be attended by the CQA Manager, CQA Officer, and CQA Monitor on-site.
- Geosynthetic pre-installation meeting: One full-day on-site meeting. This meeting will be attended by the CQA Manager, CQA Officer, and the Lead CQA Monitor.

## **Task 3: Construction Observation Services**

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Geosyntec will provide CQA services that includes CQA monitoring, sampling, field testing, and documenting liner system construction. CQA activities performed by Geosyntec will be in general accordance with the CQA plans for the project and the project plans and specifications. While on site, Geosyntec will be involved in general, earthwork, and geosynthetic field activities. Geosyntec's experienced CQA monitors will address construction related issues in the field quickly and notify the County and CM promptly when their intervention is needed.

### **General Field Activities**

Throughout construction, Geosyntec's field CQA monitors will perform daily general field activities. These activities will include the following:

- Interfacing with County and contractor personnel;
- Documenting on-site construction personnel, equipment, and weather conditions;
- Collecting and reviewing documentation as required by the plans and specifications;
- Maintaining a photographic record of construction progress; and
- Maintaining daily field logs and weekly progress reports.

### **Earthwork Field Activities**

Geosyntec will monitor and test the earthwork activities to document compliance with the plans and specifications. Geosyntec's CQA activities will include the following:

- Collection of geotechnical test samples of earthwork materials (including on-site borrow materials to be used for veneer soil and protective cover soil), shipping the samples to the testing laboratory as needed, and documenting that final cover soils



are obtained from designated locations (on-site excavations, stockpiles, and/or borrow areas);

- Monitoring, field testing, and sampling during the placement of veneer soil;
- Observation during the placement of protective cover soil;
- Monitoring protective cover soil placement thickness;
- Reviewing the geotechnical laboratory test results for compliance with the specifications.

### **Geosynthetic Field Activities**

During the geosynthetic field activities, Geosyntec field CQA personnel will perform daily activities that will include the following:

- Documenting delivery of geosynthetics at the site and comparing the delivered inventory against the inventory list prepared at the factory;
- Reviewing the manufacturer's quality control test results for compliance with the specifications;
- Documenting the storage, handling, and placement of geosynthetics delivered to the site and inspecting for damage which may have occurred during shipping and handling;
- Reviewing the laboratory test data for compliance with the specifications;
- Documenting rejection of geosynthetic materials;
- Monitoring and documenting the deployment and installation of the geosynthetic materials and marking repair locations;
- Monitoring trial geomembrane seaming and contractor destructive testing of trial seams;
- Monitoring and documenting production seaming or joining of the adjacent geosynthetics;
- Monitoring and documenting repairs for geosynthetics;
- Monitoring and documenting the non-destructive field testing of production geomembrane seams and other repairs;
- Selecting destructive geomembrane production seam sample locations and documenting their location;
- Reviewing the destructive seam test results for compliance with the specifications;
- Monitoring and documenting the repair of geomembrane production seams that failed either non-destructive or destructive CQA testing criteria.

### **Protective Cover Thickness Verification**

Geosyntec CQA program will verify/document the thickness of the protective cover soil after placement by comparing a pre- and post-survey. However, in some cases, this





approach may pose a challenge due to the impacts of settlement that occurs between the surveys. While potholing can be performed to verify cover thickness, this introduces the risk of damaging the underlying geosynthetics during the potholing process. To address this, Geosyntec proposes to monitor soil cover thickness during construction by means of cones or PVC pipes placed along the cover to serve as hike-up poles. This will allow direct observation of cover thickness which can be certified within the final construction quality assurance report.



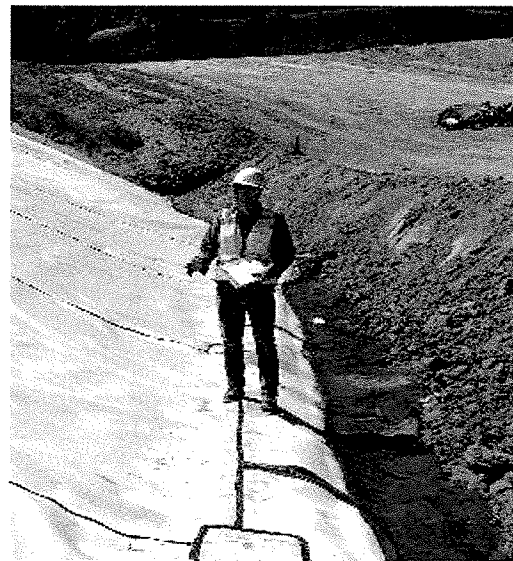
A dozer pushing protective cover soil up a lined slope at Tajiguas

### **Oversize Material in Cover**

The percentage of oversize material incorporated within soil cover systems has historically been an area of concern for the RWQCB. Full-time observation during material placement, supported by material descriptions and photographic documentation by Geosyntec's CQA Monitor, will help demonstrate to the RWQCB that no more than de minimis amount of oversize particles as required by the specifications are present in the final cover system.

### **Staffing Approach**

Our scope assumes that one CQA Monitor will be present on-site full-time for the entire duration of construction (45 working days). However, should it become apparent that additional CQA personnel are needed on site simultaneously, Geosyntec is prepared to mobilize additional monitors, as necessary, with the County's approval. Given the assumed schedule, Geosyntec has reserved the services of the lead CQA monitor identified. In the event the lead monitor becomes unavailable over the course of the project, he will be replaced temporarily by the other qualified CQA monitors.



Geosyntec's CQA Monitor documenting geosynthetic repairs during construction of Tajiguas Phase III C Groundwater Protection System.

For Task 3, Geosyntec has budgeted a total of 450 hours of on-site time (based on 45 days at 8 hours per day plus 2 hours per day for daily coordination/communication, safety and



preparation time) for CQA Monitor time, 45 hours (based on 5 hours per week) for CQA Officer time, and 20 hours for Project Director/CQA Manager over the course of the 45-day construction period.

#### Task 4: Laboratory Testing

Laboratory testing will be performed in general accordance with the project specifications and the CQA plan. Geosyntec has estimated the required laboratory testing quantities based on the engineer's estimate, the CQA plan and the clarification/response to questions issued by the County on February 6, 2023. The assumed test quantities in our proposal are presented in the following table.

**TABLE 4: LABORATORY TESTING QUANTITIES**

Type of Test	ASTM Standard	# of Tests
<b>Prepared Subgrade, Veneer Fill, Anchor Trench Backfill, Stockpile Material, and Protective Soil Cover</b>		
Moisture-Density Relationship	ASTM D 1557	6
Grain Size Distribution	ASTM D 6913	6
<b>LCRS Gravel</b>		
Grain Size Distribution	ASTM C 136	2
Hydraulic Conductivity	ASTM D 2434	2

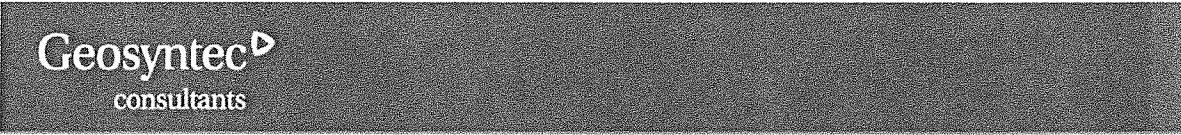
Based on the information presented in the RFP and clarification/response to questions issued by the County on February 6, 2023, Geosyntec assumes that all geosynthetics laboratory testing including but not limited to testing to measure the dimension, strength, density, resistance to tear/puncture, testing for quality control, etc. will be the responsibility of the selected contractor and/or the geosynthetics contractor. It is assumed that other potential incidental miscellaneous civil laboratory testing will be the responsibility of others.

#### Task 5: Preparation of CQA Report

At the completion of construction, Geosyntec will prepare the final CQA report that will document the quality of construction in general accordance with the project documents. The report will contain a narrative description of the significant aspects of the field and laboratory CQA activities undertaken by Geosyntec. Geosyntec will include documentation of construction activities (presented on the field logs and weekly reports) as appendices to the final report.

The Engineer-of-Record (i.e., Geosyntec's Project Director), a registered Professional Engineer (P.E.) in the State of California, will sign and seal the final report of CQA field





activities. Geosyntec will provide the County with an initial draft of the report within three weeks of completion of construction. Subsequently, Geosyntec will submit the final report to the County within one (1) week after receiving comments from the County.

Geosyntec will provide the County with an initial draft of the report within two weeks of the completion of work, pursuing a conditional approval of portions of the work if appropriate and requested by the County. Subsequently, Geosyntec will submit the final report to the County within one (1) week after receiving comments from the County. We will provide the County with professional services consistent with the standards of the profession. Our internal quality control program requires that every project deliverable be peer reviewed by a senior member of the firm with appropriate experience and qualifications prior to submittal to the client.

**Task 6: Project Management**

Geosyntec's CQA Officer, Mr. Karthik Viswanathan, will be responsible for managing the CQA personnel. Mr. Yonas Zemuy will serve as Principal-In-Charge and Senior Technical Advisor, to periodically assist Mr. Viswanathan on technical matters requiring special attention.

Additional support staff will be available in Geosyntec's Santa Barbara and Orange County offices to periodically perform project administration duties.

Geosyntec has budgeted one hour per week for the Project Director and up to three hours per week for CQA Officer for project management during the course of the project.

CQA Officer Responsibilities	Project Director/CQA Manager Responsibilities
<ul style="list-style-type: none"> <li>• Administer the contract;</li> <li>• Update the existing Site Health and Safety Plan;</li> <li>• Make site visits, including attendance at project kickoff meetings and bi-weekly construction meetings;</li> <li>• Handle CQA contract and administrative matters;</li> <li>• Introduce all project personnel;</li> <li>• Communicate regularly with on-site CQA personnel;</li> <li>• Be responsible for technical aspects of the project related to CQA;</li> <li>• Review the CQA documentation;</li> <li>• Direct CQA operations and communicate directly with the County's Site Manager and/or Construction Manager; and</li> <li>• Prepare, sign, and seal the CQA certification report.</li> </ul>	<ul style="list-style-type: none"> <li>• Technical CQA items that require special attention, such as interface conformance testing and communication with regulatory agencies (if required and approved by the County Project Manager).</li> <li>• Provide senior review of the CQA certification report.</li> </ul>

**Project Communications**

Geosyntec's CQA Officer and Manager will be actively involved in all aspects of the CQA project. The CQA Officer will attend each weekly progress meeting. To assist in maintaining open lines of communication with both the engineer and construction



manager, Geosyntec will complete a Bi-Weekly Update Form. This form provides a concise 1-page snapshot of the project from a quality perspective and can be used by the construction manager and contractor alike to plan their activities. The “Outstanding CQA Items” list included in each update will focus the team on items which need to be resolved quickly to avoid impacts to project schedule. The Central Coast RWQCB also concurs with Geosyntec’s particular format as a method of communication of project status.

## **Task 7: Engineering Support**

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Where requested by the design engineer and/or the project’s Construction Manager, Geosyntec will provide input on design changes during construction. In Geosyntec’s experience, technical challenges are a fact of life in geotechnical construction. To take the Tajiguas site as an example, previous projects have faced challenges related to stability of interim cut slopes, availability of appropriate gravel sources, availability of geosynthetics, expansive soils, hydraulic conductivity of compacted clays, and interface strengths of liner materials. In each case, Geosyntec’s team was able to develop a solution in coordination with other project team members which solved the problem. Geosyntec’s close working relationships with contractors, liner installers, and other subcontractors who are frequently involved with projects at Tajiguas are very important in providing these solutions.

For this task, Geosyntec has budgeted fifty professional hours to provide as-needed engineering support services to address/respond to technical matters pertaining to the groundwater protection system Phase IIIF construction that may arise during the project.

## **Schedule**

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Geosyntec’s approach to scheduling for this project is driven by the need to coordinate CQA activities with those of the contractor. Geosyntec plans to have one CQA monitor full-time on site for the entire construction duration (45 working days). Based on the information described in the RFP, Geosyntec’s proposal is intended to cover the period from the beginning of construction in May 2023 to the completion of construction by the end of June 2023. While our assumed schedule indicates that some of these tasks overlap, Geosyntec assumes that one onsite CQA monitor can provide the necessary CQA oversight during overlapping tasks. However, should it become apparent that additional CQA personnel are needed on site simultaneously, Geosyntec is prepared to mobilize additional monitors, as necessary, with the County’s approval.

Geosyntec understands the importance of maintaining this schedule, thus we commit to rapid resolution of submittals and RFIs and we will target to complete delivery of the CQA report to RWQCB within 3 weeks of completion of construction and the receipt of final as-builts. Geosyntec has also been successful in past phases in securing a conditional approval from the RWQCB of liner construction so that the County may occupy the subject

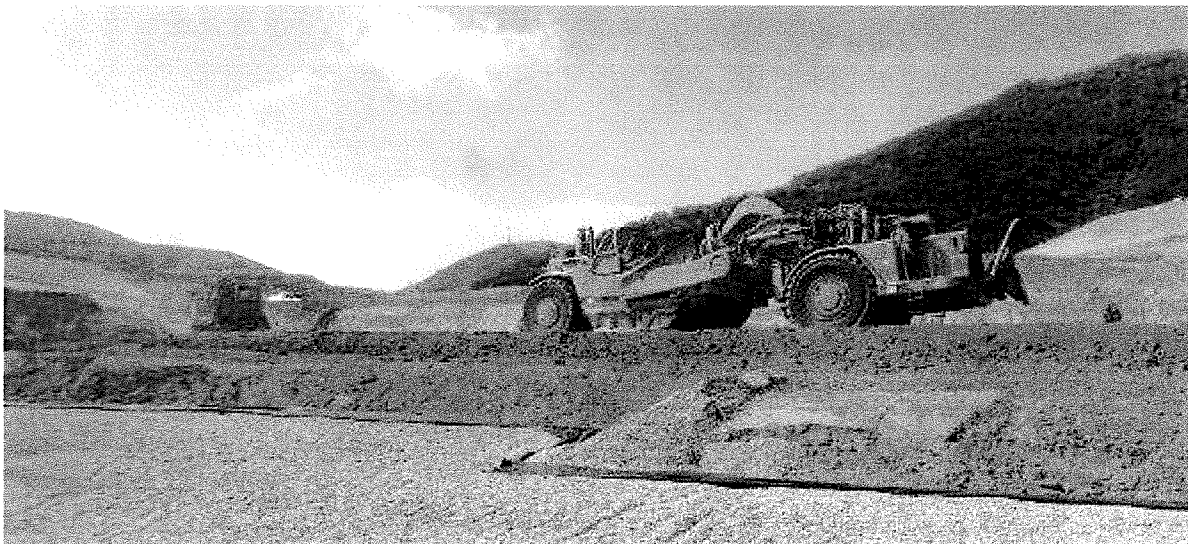


area even in advance of the review and approval of the CQA report. This timeliness in reporting and approval from RWQCB will be particularly important during this project to avoid disruption to the progress of the on-going other projects at the site. Geosyntec’s ongoing involvement in the environmental aspects of the project and our understanding of the constraints of that project will be a benefit to the County during the performance of our CQA services.

**TABLE 4: PRELIMINARY CQA SCHEDULE**

Activity	Week								
	1	2	3	4	5	6	7	8	9
Mobilization, Clear & Grub, Preparation of Subgrade, Placement of veneer fill									
Construction of Geosynthetic Liner									
Placement of Protective Cover Soil									
Note: Schedule based on assumed construction sequencing and construction phase durations. Actual schedule will be determined by the Contractor.									

**5. KNOWLEDGE & UNDERSTANDING OF FEDERAL/STATE/COUNTY PROCEDURES**



Since 2003, Geosyntec has maintained a series of Master Services Agreement with the County to provide solid waste, hazardous materials and environmental services. The



Santa Barbara office of Geosyntec was established in 2000 under the leadership of Santa Barbara-based practitioners and works seamlessly with the firm's Orange County office on significant local projects.

Geosyntec maintains excellent working relationships with the County, other local and State agencies and takes pride in our understanding of County and State procedures, guidelines and standards pertaining to the environment. We have worked closely with most County and State agencies regarding environmental matters and have provided expert testimony regarding application of environmental regulatory issues to site issues. With regard specifically to groundwater protection, Geosyntec's project personnel understand the Title 27/Subtitle D regulatory requirements as well as recent RWQCB interpretations and has well-established working relationships with the relevant regulatory agencies. Geosyntec's project personnel have developed excellent relationships with the relevant state regulators, which includes Ryan Lodge and Martin Fletcher of the Central Coast RWQCB. Additionally, Geosyntec has worked closely with SWT on numerous similar project both for the County and other clients. This allows us to work seamlessly with the entire team to achieve successful project completion.

## **6. ADDENDA TO RFP**

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Geosyntec acknowledges receipt of Questions and Answers (Q&A) that was released by the County on February 6<sup>th</sup>, 2023.

## **7. COST PROPOSAL**

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For the scope of work described in the RFP and response to questions that was issued by the County on February 6<sup>th</sup>, 2023, Geosyntec assumed a total project duration of 45 workdays to provide full time CQA services at 8 hours per day. Per the RFP requirements, Geosyntec prepared a detailed cost estimate that include description of anticipated direct and indirect costs to perform the specified work (e.g., labor, equipment, materials, supplies, travel, per diem, lodging, meetings, data evaluation, report preparation, administrative charges, company mark-ups, profit, etc.).

Geosyntec's cost estimate include detailed description and breakdown of the costs involved in performing work tasks described in the RFP. Geosyntec's cost estimate include hourly charges for its personnel for each task, subcontractors' expenses and include unit prices for the CQA testing methods and analysis procedures described in the RFP documents.

An hourly rate schedule that lists the hourly cost for direct, overhead, fixed fee, and overtime cost for Geosyntec Project personnel assigned to the Project by classification is also included in our cost estimate.

Per the RFP requirement, Geosyntec's detailed cost estimate including hourly rate schedule is submitted (i.e., uploaded) separately).



## ATTACHMENT A - RESUMES

### YONAS ZEMUY, PE

### ROLE: PROJECT DIRECTOR/CQA Manager

**OFFICE LOCATION** | Costa Mesa, California

#### CREDENTIALS

- MS, Geotechnical Engineering, UCLA
- BS, Civil and Environmental Engineering, UCLA
- Professional Engineer, Civil, CA No. C79713
- Professional Engineer, Civil, CA No. C79713
- Professional Engineer, Civil, CA No. C79713
- OSHA Certified 40-Hour HAZPOWER (29 CFR 1910.120)
- USACE Construction Quality Management (CQM)

#### RELEVANT TAJIGUAS EXPERIENCE

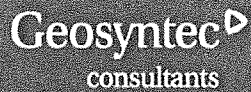
- Managed several CQA projects during landfill geosynthetic liner systems and cover constructions in California,
- Savage Canyon, Sunshine Canyon and Taft Landfill Module 2 CQA and engineering support during final closure of Phase I Olinda Alpha landfill.
- Prepared detailed technical specifications and CQA plans that gained regulatory approval with little to no changes

Mr. Zemuy is a Principal Engineer with Geosyntec with over 20 years of experience in landfill CQA services and geotechnical engineering. His expertise includes relevant experience with landfill fieldwork, laboratory testing programs, interpretation of compaction, density and moisture content testing in-situ subsurface conditions drilling operations, soil classification and borrow-source evaluations. Mr. Zemuy's experience includes providing civil and geotechnical engineering support, landfill design, liner system and closure construction, post-closure maintenance and construction CQA services; Waste excavation and placement of waste, construction of new landfill cells. Mr. Zemuy has managed these services for several local government projects including clients such as OC Waste & Recycling, City of Whittier, City of Los Angeles (Bureau of Sanitation) and Kern County.

#### KEY PROJECTS

**Taft Recycling and Sanitary Landfill (TRSL), Taft, California.** Geosyntec provided full-design services for a lateral extension, grading and drainage work, landfill gas and leachate collection system. Mr. Zemuy managed the preparation of design/construction drawings, design report and technical specifications. The project involved extensive grading work, landfill phase development, relocation of an existing waste trench, and preparation of a comprehensive design report. Geosyntec also provided full CQA services during the construction of Module 2, TRSL. Mr. Zemuy managed the CQA program, served as the technical lead for the project and prepared detailed CQA report in accordance with Title 27 of the California Code of Regulations. The design and construction of Module 2, TRSL was approved by the RWQCB in an expedited manner.

**Savage Canyon Landfill Phase 3A Composite Liner System, Whittier, California.** Mr. Zemuy was the Project Manager for the Construction Quality Assurance services provided during earthwork and stockpiling operations and Geosynthetic landfill liner system installation. The liner system for the Phase 3A included Geosynthetic Clay Liner (GCL), High Density Polyethylene (HDPE) and geotextile. Mr. Zemuy provided



engineering support services, including review of lab testing, contractor submittal review, and logging. Mr. Zemuy also reviewed and certified the final CQA report.

**Sunshine Canyon Landfill 4 Acre Closure Turf, Sylmar, California.** Mr. Zemuy served as the Project Director during for the Sunshine Canyon Landfill Closure Turf construction project and provided CQA Services during the liner system construction, earthwork operations and installation of leachate collection and removal systems during construction of the closure turf at the landfill. The project involved earthwork observation, field and lab testing, and report preparation. Mr. Zemuy reviewed\signed the final CQA report for the project.



## KARTHIK VISWANATHAN, EIT

**ROLE: CQA OFFICER**

**OFFICE LOCATION** | Costa Mesa, California

### CREDENTIALS

- MS, GeoSystems Engineering, UC Berkeley
- BTech, Civil Engineering, Amrita Vishwa Vidyapeetham, India
- OSHA Certified 40-Hour HAZPOWER (29 CFR 1910.120)

### RELEVANT TAJIGUAS EXPERIENCE

- Managed CQA projects during landfill geosynthetic liner systems and earthwork constructions in California
- Savage Canyon, Sunshine Canyon and Tajiguas Sanitary Landfill engineering support services during construction.

Mr. Viswanathan is a Project Engineer with Geosyntec with over five years of experience in landfill CQA services and geotechnical engineering. He has experience managing and providing field CQA for earthwork and liner components of development projects, dam rehabilitation, and municipal solid waste landfills. His expertise includes relevant experience with landfill fieldwork, laboratory testing programs, interpretation of compaction, density and moisture content, testing in-situ subsurface conditions, drilling operations and soil classification. Mr. Viswanathan's experience also includes conducting geotechnical stability analyses; evaluation of design reports and site and laboratory testing data; performing in-situ soil and concrete property testing; and preparation of grading plans, CQA plans, technical specifications, and engineers' cost estimates.

### KEY PROJECTS

**Sunshine Canyon Landfill Ultimate Entrance Improvement Phases 1 and 2, Sylmar, California.** Mr. Viswanathan observed earthwork operations and performed field density tests to verify compaction during the construction of Phases 1 and 2 of the Ultimate Entrance Improvements of the landfill. Mr. Viswanathan also observed concrete placement operations and performed conformance tests. The project involves approximately 195,000 yd<sup>3</sup> of excavation and 330,000 yd<sup>3</sup> of engineered fill. Mr. Viswanathan serves as the project manager and provides engineering support services, including lab testing coordination and attending weekly construction meetings.

**Savage Canyon Landfill Phase 1-3A LCRS Sump Tie-in, Whittier, California.** Mr. Viswanathan assisted with the preparation of the design drawings for the construction phase of the LCRS Sump Tie-in. During construction, Mr. Viswanathan observed waste excavation and stockpiling; provided CQA services, including field coordination, communication with testing laboratory, reviewing laboratory results and field documents. Mr. Viswanathan also reviewed submittals and requests for information. Mr. Viswanathan also prepared the CQA report and served as the project manager.

**Savage Canyon Landfill Phase 3A Composite Liner System, Whittier, California.** Mr. Viswanathan observed earthwork and stockpiling operations and performed field density tests to verify compaction during the construction of Phase 3A of the landfill. Mr. Viswanathan also observed concrete placement operations and performed conformance slump tests. Mr. Viswanathan provided engineering support services, including lab testing, contractor submittal review, and logging. Mr. Viswanathan prepared the CQA report.





## CHRIS CONKLE, PE, GE

## ROLE: TECHNICAL SUPPORT

**OFFICE LOCATION** | Downtown Los Angeles, California

### CREDENTIALS

- MS, Geoengineering, UC Berkeley
- BS, Civil Engineering, UC Berkeley
- Professional Engineer Geotechnical, CA No. GE2926
- Professional Engineer Civil, CA No. C70923

### RELEVANT TAJIGUAS EXPERIENCE

- Served as CQA Manager for the Tajiguas Phase IIA, IIB, IIC, IIIA, IIIB, and IIIE landfill liner expansion projects. All five projects were completed on time without and construction-related claims.
- Served as CQA manager for the closure of the existing waste management unit 2 at the Prima Deshecha Landfill during construction of the La Pata Avenue Gap Closure.

Mr. Conkle is a Geotechnical Engineer at Geosyntec with 18 years of experience in landfill, geotechnical, and construction related engineering. He has managed and executed geotechnical investigation, analysis, design, and construction quality assurance (CQA) monitoring projects for a wide variety of geotechnical systems, including landfills, landslide remediation, and engineered slopes. He has performed design and analysis for a number of municipal solid waste landfills, waste containment systems and Superfund sites throughout the United States. This experience include design and CQA services for both liner and final closure projects throughout Southern California.

### KEY PROJECTS

**Tajiguas Sanitary Landfill, Santa Barbara County, California.** Mr. Conkle provided geotechnical design and CQA management roles for the construction of the phase IIA, IIB, IIC, IIIA, IIIB, IIIC, and IIIE liner expansion projects. During these projects, Mr. Conkle worked effectively with the designer SWT Engineering and the general contractor to produce a construction quality assurance report that satisfied the regional quality control board with minimal comment.

**Prima Deshecha Landfill, La Pata Avenue Gap Closure, Orange County, California.** In addition to acting as Geotechnical Engineer of Record for several components of this project, Mr. Conkle was the CQA Manager for partial final closure construction at Prima Deshecha Landfill Property. The roadway crosses the existing WMU2 portion of Prima Deshecha and a large paleo-landslide, both of which present significant design challenges. Under Mr. Conkle's direction, Geosyntec provided CQA services during waste excavation, subgrade preparation, foundation soil layer construction, geosynthetics installation, and protective cover soil placement.

**Los Alamitos Joint Forces Training Base, Los Alamitos, California.** Mr. Conkle assisted in preparation of detailed design plans and specification for a new 10-acre solid waste landfill as part of a closure of an existing landfill at the Los Alamitos JFTB. This design included all geotechnical aspects of the project, including geosynthetics, embankment stability, and seismic design. Additionally, Mr. Conkle assisted with the design hydrology, surface water management feature design, and selection of construction best management practices.





## DOUG HAMILTON

## ROLE: CQA MONITOR LEAD

**OFFICE LOCATION** | Boca Raton, Florida

### CREDENTIALS

- Certified Geosynthetic Certification Institute – Inspector Certification Program (GCI – ICP). Geosynthetic Materials and Clay Liner, December 2006, No. 138-06 Recertification December 2011
- Troxler Electronics Nuclear Moisture/Density Gauge Operation
- OSHA Certified 40-Hour HAZPOWER (29 CFR 1910.120)
- Certified DOT IATA Hazmat Transportation

### RELEVANT TAJIGUAS EXPERIENCE

- Lead CQA Monitor for Tajiguas Phase IIIA, IIIB and IIIE liner expansions
- 26 years of CQA monitoring experience related to earthworks and geosynthetics construction.
- Inspection of over 80 million square feet of several types of geomembranes
- Field soils testing experience including in-place moisture/density, and visual classification

Mr. Hamilton is Site Manager II at Geosyntec with over 32 years of experience in comprehensive landfill engineering field services and CQA. His responsibilities include QA/QC oversight and inspection; CQA Plan implementation; review of contractor submittals; construction documentation including the preparation of daily and weekly progress reports, meeting agendas, and minutes; and developing test result databases. Mr. Hamilton's municipal solid waste (MSW) landfill construction experience includes oversight of landfill gas extraction systems, multi-layer liner systems, and low permeability soil and geosynthetic capping systems. Mr. Hamilton has provided construction quality assurance (CQA) oversight for over 80 million ft<sup>2</sup> of both smooth and textured High-Density Polyethylene (HDPE), Very Low-Density Polyethylene (VLDPE), and Linear Low-Density Polyethylene (LLDPE) and Polypropylene (PP), polyvinyl chloride (PVC), and spray asphaltic geomembranes (SAG). In addition, Mr. Hamilton has provided CQA monitoring services for the installation of geotextiles, geogrids, geonets, geocomposite, and geosynthetic clay liners.

### KEY PROJECTS

**Tajiguas Sanitary Landfill, Cell IIIA, IIIB, and IIIE Santa Barbara, California.** Mr. Hamilton provided CQA of geomembrane, low permeability layer, drainage gravel, LCRS system, and protective cover soil. Responsible for performing field moisture/density tests, visual classification, and conformance sampling of engineered soil layers. Maintained a test database that assisted with client-CQA Manager-contractor communication.

**Municipal Solid Waste Landfill Closure Keene Road Parcel 1 and 2 Class III Closure, Apopka, Orange County, Florida.** Mr. Hamilton provided CQA of 2,700,000 ft<sup>2</sup> of 50mil super gripnet and 40mil smooth LLDPE geomembranes. His responsibilities included performing field nuclear moisture/density testing on the compacted fill material of the subgrade. CQA of geomembrane, geotextile and protective cover material and gas collection system installation, also responsible for the installation of down chutes and drainage aggregate. A PDA was used for the efficiency and quality of data collected.

**STEWART AADNES****ROLE: CQA MONITOR****OFFICE LOCATION** | San Diego, California**CREDENTIALS**

- Certified Nuclear Moisture/Density Gauge Operator
- OSHA Certified 40-Hour HAZPOWER (29 CFR 1910.120)
- OSHA Certified, Supervisors Health and Safety Training (29 CFR 1910.120 e)
- Confined Space Entry (29 CFR 1910.146&29 CFR 1926.501 & 502 (k))

Mr. Aadnes is a Construction Manager at Geosyntec with over 22 years of construction experience comprehensive landfill engineering field services, including construction of numerous landfills, clean closure of landfills, remediation system O&M, and LFG control system assessments and upgrades. He has been involved with new cell and closure construction activities that include earthwork, geosynthetic liner systems, gas collection systems, surface water control systems, access roads, and other miscellaneous landfill facilities. Mr. Aadnes has monitored over 25 million ft<sup>2</sup> of geomembrane installation and has detailed knowledge of all construction documentation and CQA field and laboratory testing protocols. Mr. Aadnes has served dual roles on several projects as the on-site CQA Manager and on-site Construction Manager to reduce client costs.

**KEY PROJECTS**

**Hazardous Waste (Class 1) Landfill, WMU 35 Expansion, Buttonwillow, California.** Lead CQA Technician. Monitored and documented approximately 800,000 ft<sup>2</sup> of each geosynthetic components (80-mil geomembrane, geocomposite, and geotextiles) installed for the project. Mr. Aadnes was directly responsible for reviewing and approving installers geomembrane documentation as well as setting up a CQA soils laboratory for the on-site testing of earthwork materials. Earthwork consisted of CQA testing of approximately 100,000 yd<sup>3</sup> of Engineered Fill and 100,000 yd<sup>3</sup> of Compacted Soil Liner Material (clay).

**Savage Canyon Landfill, Phase 2A Expansion, Whittier, California.** Lead CQA Monitor. Mr. Aadnes was directly responsible for all documentation and testing procedures. Monitored and documented approximately 200,000 ft<sup>2</sup> of each geosynthetic component (geomembrane, GCL, geocomposite, and geotextile) installed for the project. Earthworks consisted of CQA testing of approximately 100,000 yd<sup>3</sup> of Engineered Fill and 3,500 yd<sup>3</sup> of Compacted Soil Liner material.

**Otay Landfill, Canyon 3, Phase 3A Expansion, Chula Vista, California.** Site CQA Manager. Mr. Aadnes implemented and monitored the CQA program. Monitored and documented approximately 406,000 ft<sup>2</sup> of geomembrane, 170,600 ft<sup>2</sup> of geotextile, and 236,800 ft<sup>2</sup> of drainage composite installed for the project. Earthworks consisted of CQA testing of 18,000 yd<sup>3</sup> of Engineered Fill.

**CORY MILLER****ROLE: CQA MONITOR****OFFICE LOCATION** | Boca Raton, Florida**CREDENTIALS**

- OSHA Certified 40-Hour HAZPOWER (29 CFR 1910.120)
- Troxler Nuclear Moisture/Density Gauge
- Duke 2017 Power Safe Training
- Class B CDL Georgia License

Mr. Miller is a Site Manager I at Geosyntec with over 11 years of experience in multiple phases of containment system construction, operations, and closure. His experience includes landfill gas collection and control system construction and operation, CQA on landfill and other waste containment projects (e.g., municipal solid waste, coal combustion residuals) for new construction and closure, and contractor oversight and management on a variety of environmental remediation and enviro-civil construction projects. He has been involved with new cell and closure construction activities, which include earthwork, geosynthetic liner systems, gas collection systems, surface water control systems, access roads and other miscellaneous landfill facilities. Mr. Miller has monitored over 10 million ft<sup>2</sup> of geomembrane installation and has detailed knowledge of all construction documentation and CQA field and laboratory testing protocols.

**KEY PROJECTS**

**Central Landfill-Phase V, Cell A, Santa Rosa County, Florida.** Mr. Miller provided CQA oversight during excavation of Cell A, Leachate Storage Facility Ponds A and B, and Stormwater Pond #2. He oversaw conformance testing of borrow source soil, placement of general fill, and density testing of placed material for approximately 96,950 yd<sup>3</sup> within Cell A and Leachate Storage Facility Ponds A and B.

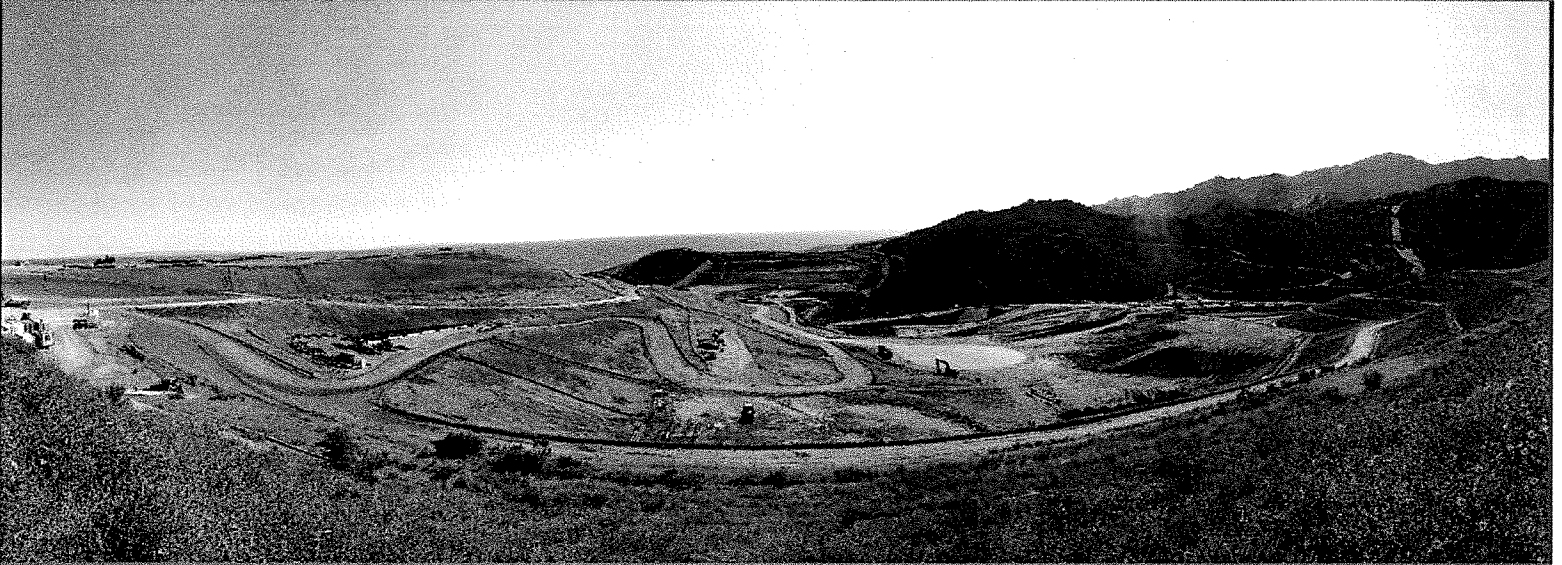
**Perdido Landfill, Escambia County, Pensacola, Florida.** Mr. Miller provided CQA oversight during installation of three HDPE horizontal gas collectors installed at the active face of the landfill as well as bollard installation at the haul route to protect the previously installed gas wells.

**Duke Energy Progress, Cells 3, 4, 5, 6, 7, and 8 / CCR Disposal Facility, L.V. Sutton Energy Complex, Wilmington, North Carolina.** Mr. Miller provided CQA oversight during construction of six, 10-acre double composite lining systems including: 410,045 yd<sup>3</sup> subgrade; 59,094 yd<sup>3</sup> low-permeability soil liner, GCL, 5,003,710 ft<sup>2</sup> of 60-mil HDPE textured geomembrane liner, geonet composite drainage layer, leachate collection systems and protective cover soil.

**Onondaga Lake Industrial Landfill & Lake Bottom Subsite Closure, Syracuse, NY.** Provided third party CQA oversight during the placement of the composite liner cap including approximately 362,000 yd<sup>3</sup> of leveling layer soils, installation of 2,180,000 ft<sup>2</sup> composite cap system

FEE PROPOSAL  
**Construction Quality Assurance Services for  
Groundwater Protection System Phase III F  
Construction Project at the Tajiguas Sanitary Landfill**

CONSTRUCTION PROJECT NO. 828396 | FEBRUARY 9, 2023



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PREPARED BY



PREPARED FOR



SANTA BARBARA COUNTY  
**Resource Recovery &  
Waste Management Division**  
*Innovative Environmental Solutions*





FEE PROPOSAL  
Construction Quality Assurance Services for  
Groundwater Protection System Phase IIIF  
Construction Project at the Tajiguas Sanitary Landfill

924 Ancapa Street, Suite 4A  
Santa Barbara, California 93101  
P 805 897 3800  
www.geosyntec.com

February 9, 2023  
Updated on February 24, 2023

Ms. Jamie Reyes  
County of Santa Barbara - Public Works Department  
130 E. Victoria Street, Suite 100  
Santa Barbara, California 93101

**Subject: Cost Proposal Construction Quality Assurance Services  
Tajiguas Landfill - Groundwater Protection System Phase IIIF  
Construction Project No. 828396**

Dear Ms. Reyes:

## 1. INTRODUCTION

Geosyntec Consultants, Inc. (Geosyntec) is pleased to submit this cost proposal to provide Construction Quality Assurance (CQA) services in support of construction of the Phase IIIF Groundwater Protection System project. Per the Request for Proposal (RFP) requirements, this cost proposal is provided separately from our technical proposal.

This cost proposal contains Geosyntec's proposed fee schedule and brief project approach in the form of scope of work, schedule, and cost estimate.

## 2. SCOPE OF WORK AND SCHEDULE

Geosyntec has organized the scope of work into the following seven tasks:

- Task 1: Pre-Construction Work
- Task 2: Participation in Meetings
- Task 3: Construction Observation Services
- Task 4: Laboratory Testing
- Task 5: Preparation of CQA Report
- Task 6: Project Management
- Task 7: Engineering Support



### **Task 1: Pre-Construction Work**

As described in detail in our technical proposal, prior to the start of construction, Geosyntec will review relevant project-related documents, prepare a project-specific health & safety plan, and review liner manufacturer/subcontractor certifications and qualifications.

### **Task 2: Participation in Meetings**

During the course of the project construction, Geosyntec CQA Officer and/or Project Director, CQA Monitor will participate in various meetings including pre-construction meeting on site, weekly progress meetings, up to two special meetings (if requested), and an on-site Geosynthetic pre-installation meeting. Additional detailed description for this task is included in our technical proposal.

### **Task 3: Construction Observation Services**

Geosyntec will provide CQA services that includes CQA monitoring, sampling, field testing, and documenting liner system construction. CQA services performed by Geosyntec will be in general accordance with the CQA plan for the project and the project plans and specifications. While on site, Geosyntec will be involved in general, earthwork, and geosynthetic field activities.

For Task 3, Geosyntec has budgeted a total of 360 hours (based on 45 days at 8 hours work day for field work, preparation, communication and safety discussions per day) for CQA Monitor time over the course of the 45-day construction period. This includes CQA monitor time onsite for veneer soil placement, geosynthetic deployment and seaming, LCRS system installation, and protective cover soil placement. Additionally, we have budgeted for 45 hours of CQA Officer time and 20 hours of CQA Manager time as part of Task 3. As a potential cost saving measure, Geosyntec will provide an experienced Senior Technician-I to provide CQA services during the earthwork portion of the project. For budgeting purposes, Geosyntec assumed that the CQA services during the geosynthetic liner installation will be provided by a Senior Technician-II.

### **Task 4: Laboratory Testing**

Laboratory testing will be performed in general accordance with the project specifications and the CQA plan. Geosyntec assumes that the following laboratory testing will be performed:

- Moisture-Density Relationship by ASTM D 1557
- Particle Size Analysis (Veneer fill and Protective Cover Soil) by ASTM D 6913
- Particle Size Analysis (Drainage gravel) by ASTM C136
- Hydraulic Conductivity/Permeability (Drainage Gravel) by ASTM D2434



Geotechnical laboratory testing will be conducted by AP Engineering & Testing, with which Geosyntec has had a long-term working relationship. All geosynthetic laboratory testing will be the responsibility of the geosynthetic contractor. It is assumed that other potential incidental miscellaneous laboratory testing expenses will be the responsibility of others.

### **Task 5: Preparation of CQA Reports**

At the completion of construction, Geosyntec will prepare a CQA report that will document the quality of construction in general accordance with the project documents. The report will contain a narrative description of significant aspects of the field and laboratory CQA activities undertaken by Geosyntec. Geosyntec will include documentation of construction activities (presented on the field logs and weekly reports) as appendices to the report.

The Engineer of Record (i.e., Geosyntec's Project Director), a registered Professional Engineer (P.E.) in the State of California, will sign and seal the final report of CQA field activities. Geosyntec will provide the County with an initial draft of the report within three weeks of the completion of the liner installation. Subsequently, Geosyntec will submit a final report to the County within one (1) week after receiving comments from the County.

### **Task 6: Project Management**

Geosyntec's CQA Officer, Mr. Karthik Viswanathan will be responsible for managing the CQA personnel. Mr. Yonas Zemuy, P.E. will serve as the Project Director and CQA Manager and periodically assist Mr. Viswanathan on technical matters requiring special attention.

Geosyntec has budgeted one hour per week for the Project Director and up to two to three hours per week for CQA Officer for project management during the course of the project.

### **Task 7: Engineering Support**

Geosyntec has budgeted up to twenty-five professional hours to provide as-needed engineering support services to address/respond to technical matters pertaining to the groundwater protection system Phase IIIF construction that may arise during the project. Geosyntec will also perform geotechnical evaluations for Phase IIIF considering the proposed waste fill grades. Geosyntec will utilize the work performed as part of previous geotechnical evaluations and prepare a letter report describing its analyses and presenting its findings specific to Phase IIIF. Slope stability analyses will be performed for temporary cut slopes, temporary waste fill slopes, and final waste fill slopes. The recently updated ground motion hazard analyses will be included in the letter report and seismic stability and permanent seismic displacement analyses will also be performed utilizing the

updated ground motion hazard analysis. The letter report will also include exhibits showing the site location, base grades and final grades, and the cross section through the Phase IIIF. Geosyntec will prepare a draft letter for County's review and will finalize its report incorporating relevant comments.

## Schedule

Geosyntec assumes that a CQA Monitor will be present on-site full-time during construction of this project. We understand that the project construction will commence at the beginning of May 2023 and will continue for 45 working days.

## 3. COST ESTIMATE

This cost proposal is intended to cover the period from the beginning of construction in May 2023 to the completion of construction by the end of June 2023 and submittal of a draft CQA report within three weeks after the completion of the construction project and receipt of the As-built drawings. If the actual construction schedule differs, Geosyntec reserves the right to renegotiate the rates provided in our attached rate sheet or submit a change order request for the anticipated additional scope of work.

## Assumptions

Geosyntec made the following assumptions in preparing the cost estimate:

- **Project Documents:** The County will make available a sufficient number of copies of the project documents (including a set of full-size drawings) for the site personnel at the pre-construction meeting.
- **Health and Safety Plan:** The owner or contractor will provide: (i) their own necessary Health and Safety Plan for the scope of work described herein; and (ii) any necessary monitoring equipment. Geosyntec will develop its own Health and Safety Plan for the CQA activities carried out by Geosyntec personnel.
- **Expenses:** Geosyntec will invoice costs for expenses (including vehicle, per diem, mileage, and other project-specific purchases and expenses). Geosyntec details these expenses in the attached cost breakdown tables.
- **Travel:** Geosyntec will bill travel expenses at cost plus 12% markup; however, Geosyntec will not bill the County for costs associated with personnel rotation travel, should it occur.
- **Charged Time:** Hours worked on the project will be billed at the rates indicated in the attached Schedule of Fees (these rates are also utilized in the project cost build-up). The cost estimate assumes that CQA monitors are required to perform

work no more than 8 hours per day and will be paid based on prevailing wage laws. Overtime rates are provided in the fee Schedule. If CQA staff work federal statutory holidays (i.e., Thanksgiving Day, Christmas, etc.), the rates provided will be doubled for hours worked on these days, in accordance with prevailing wage laws.

- **Accommodations and Meals:** Geosyntec will bill a per diem of \$74 per person per calendar day for meals in general accordance with per diem requirements for Santa Barbara County. In addition, Geosyntec will bill for required lodging at \$225 per calendar day per person. In the event of inclement weather or construction delays, Geosyntec will bill for accommodations for on-site personnel regardless of days not worked.
- **Vehicle:** Geosyntec proposes to provide a rental/company vehicle for use by Geosyntec CQA personnel on site. The estimated costs for this vehicle (\$675 per work-week), included in the budget estimate, include the costs of fuel and maintenance.
- **Consumables:** Geosyntec estimates that \$1,000 for the project will cover the cost of field supplies (small tools, markers, paint, soil sample bags, photographs, computer supplies, etc.), and will be billed at cost plus 12% markup.
- **On-Site Facilities:** Based on information provided in the RFP, we understand that Geosyntec CQA personnel may utilize the following County facilities: conference room with Wi-Fi, restrooms and kitchen facilities, and secured storage for equipment.
- **Field Equipment:** Geosyntec will provide a nuclear moisture/density gauge for use by CQA personnel. The estimated cost indicated in Table 3 for these items includes shipping costs to and from the site and includes the total rental charges for the equipment. Geosyntec understands that the County will provide a proper overnight storage area for the nuclear gauge, which requires special handling and lockdown.
- **Change Orders:** Changes to the scope of work for CQA services (including number of working days, field monitors, and laboratory testing requirements) must be approved in writing between the County and Geosyntec. Changes can be approved on a Geosyntec Field Change Order Form or an appropriate County form.
- **Field and Laboratory Testing:** Geosyntec developed the cost estimate assuming that the field and laboratory testing requirements and material quantities presented in this proposal are appropriate. Additional testing, if required due to failing

materials or other reasons, will be conducted per the rates in this proposal with County approval prior to conducting the tests.

- **Meetings:** The fee estimate assumes the following meetings. One on-site pre-construction meeting will be attended by the CQA Manager, CQA Officer, and on-site CQA Monitor; progress meetings once per week (assumed duration 2 hours each) will be attended by the CQA Officer; up to 2 special meetings (assumed duration 2 hours each) on site, if requested, and one Geosynthetic pre-installation meeting (one full day on site) will be attended by the CQA Manager, CQA Officer, and CQA Monitor throughout the duration of the project.

### Proposed Fee

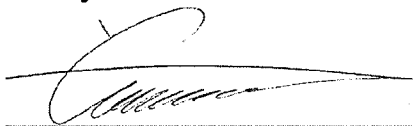
Geosyntec proposes to bill for its services on a Time and Material basis. An estimate of the cost breakdown is included in Tables 1 through 4. The estimated cost for providing the scope of services detailed in this proposal is **\$203,698**. For budgeting purposes, Geosyntec also included an additional ten percent (10%) contingency to the overall project cost estimate, thus the estimated total cost estimate including a 10% contingency is **\$224,679**. Geosyntec will invoice costs for expenses incurred related directly to providing this CQA and engineering support.

### 4. CLOSING

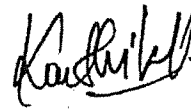
Geosyntec is enthusiastic about working with the Santa Barbara County Public Works Department on this important project. Please contact either Yonas Zemuy or Karthik Viswanathan at the numbers provided below if you have any questions or comments or if you need additional information.

Sincerely,

**Geosyntec Consultants**



**Yonas Zemuy, P.E.**  
**Project Director/CQA Manager**  
Direct: (714) 465-1256  
E-mail: [yzemuy@Geosyntec.com](mailto:yzemuy@Geosyntec.com)



**Karthik Viswanathan, EIT**  
**Project Professional/CQA Officer**  
Direct: (714) 465-1250  
E-mail: [kviswanathan@geosyntec.com](mailto:kviswanathan@geosyntec.com)

### Attachments:

- **Cost Estimate Breakdown Tables 1 - 4**
- **Geosyntec 2023 Rate Schedule**



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Groundwater Protection System Phase IIIF  
Construction Project at the Tajiguas Sanitary Landfill

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## **COST ESTIMATE BREAKDOWN TABLES 1-4**







**TABLE 2**  
**Estimated Laboratory Testing Expenses**  
**Groundwater Protection System Phase III CQA Services**  
**Tajiguas Sanitary Landfill**  
**Santa Barbara County, California**

Type of Test	ASTM Standard	No. of Tests	Unit Price	Total Cost
<b>Fill Construction Testing</b>				
Sieve Analysis (Foundation Layer, PCS)	D6913	6	\$149	\$894
Modified Proctor Moisture-Density Relationship (Foundation Layer, PCS)	D1557	6	\$208	\$1,248
Sieve Analysis (Drainage Gravel)	C136	2	\$159	\$318
Hydraulic Conductivity/Permeability (Drainage Gravel)	D2434	2	\$185	\$370
<b>Sub-total Geotech Construction Testing</b>				
				<b>\$2,830</b>
<b>Shipping Costs</b>				
	LS	1	\$1,000	\$1,000
<b>TOTAL - LABORATORY TESTING</b>				<b>\$3,830</b>

Notes:

1: Number of tests performed will not exceed the estimate above without written approval from the County

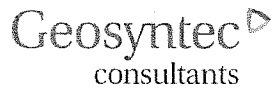


**TABLE 3**  
**Estimated Field and Lodging Expenses**  
**Groundwater Protection System Phase III CQA Services**  
**Tajiguas Sanitary Landfill**  
**Santa Barbara County, California**

Expense type	Task	Unit	Rate	Quantity	Total
Company Vehicle Rental (CQA Manager and Project Director for Meetings)		Day	\$135	4	\$540
Per Diem (CQA Monitor)		Day	\$74	63	\$4,662
Lodging (CQA Monitor)		Day	\$225	63	\$14,175
Company Vehicle Rental (CQA Monitor)		Day	\$135	45	\$6,075
Nuke gauge rental		Week	\$425	6	\$2,550
Field Supplies		NTE	\$1,000	1	\$1,000
<b>TOTAL - FIELD EXPENSE</b>					<b>\$29,002</b>

**TABLE 4**  
**Detailed Geosyntec Labor Cost Estimate**  
**Groundwater Protection System Phase III/CQA Services**  
**Tajiguas Sanitary Landfill**  
**Santa Barbara County, California**

Work Element Number	Task	Principal (Project Director / CQA Manager)	Project Professional (CQA Officer)	Sr. Staff Professional	Sr. Earthwork Technician-1 (Standard Wage)	Sr. Earthwork Technician-1 (Prevailing Wage)	Sr. Geosynthetic Liner Technician-II (Standard Wage)	Sr. Geosynthetic Liner Technician-II (Prevailing Wage)	Designer	Project Administrator	Clerical	TOTAL (hours)	Total Labor cost										
<b>1 Pre-Construction Work</b>																							
1.1	Review of Relevant Sections of Relevant Project Documents Listed in RFP	4	8	15							2	29	\$5,688										
1.2	Preparation of project-specific HASP	2	2	4							2	10	\$1,838										
1.3	Review of Liner Manufacturer Certifications and Qualifications	2	8									10	\$2,340										
	<b>Sub-total for Task 1</b>	<b>8</b>	<b>18</b>	<b>19</b>							<b>4</b>	<b>49</b>	<b>\$9,866</b>										
<b>2 Participation in Meetings</b>																							
2.1	Preconstruction Meeting (Including travel time)	8	8		8							24	\$4,904										
2.2	Weekly Progress - Total 9 Meetings (Virtual)		18									18	\$4,032										
2.3	Two Special Meetings - 2 hours per meeting plus travel time (3 hr each way)	16	16		4							36	\$8,428										
2.4	Geosynthetic Pre-Installation Meeting	8	8			8						24	\$5,008										
	<b>Sub-total for Task 2</b>	<b>32</b>	<b>50</b>	<b>12</b>	<b>8</b>	<b>8</b>						<b>102</b>	<b>\$22,372</b>										
<b>3 Construction Observation Services</b>																							
3.1	CQA, Reports, Review	20	45		240							429	\$63,580										
	<b>Sub-total for Task 3</b>	<b>20</b>	<b>45</b>		<b>240</b>							<b>429</b>	<b>\$63,580</b>										
<b>4 Laboratory Testing</b>																							
4.1	Lab Testing	2	8									14	\$2,600										
	<b>Sub-total for Task 4</b>	<b>2</b>	<b>8</b>									<b>14</b>	<b>\$2,600</b>										
<b>5 Prepare CQA Report</b>																							
5.1	Prepare Draft CQA Report	8	32	40					12			96	\$18,660										
5.2	Prepare Final CQA Report	4	12	16					4			38	\$7,402										
	<b>Sub-total for Task 5</b>	<b>12</b>	<b>44</b>	<b>56</b>					<b>16</b>			<b>134</b>	<b>\$26,062</b>										
<b>6 Project Management</b>																							
6.1	Project Management & Administration	10	40							10		60	\$12,550										
	<b>Sub-total for Task 6</b>	<b>10</b>	<b>40</b>							<b>10</b>		<b>60</b>	<b>\$12,550</b>										
<b>7 Engineering Support</b>																							
7.1	Engineering Support	25	40	50					10			125	\$26,310										
	<b>Sub-total for Task 7</b>	<b>25</b>	<b>40</b>	<b>50</b>					<b>10</b>			<b>125</b>	<b>\$26,310</b>										
	<b>Contingency (10%)</b>												<b>\$20,370</b>										
												<b>ESTIMATED TOTAL HOURS/COST</b>	<b>109</b>	<b>245</b>	<b>125</b>	<b>240</b>	<b>8</b>	<b>120</b>	<b>26</b>	<b>10</b>	<b>18</b>	<b>913</b>	<b>\$183,710</b>



FEE PROPOSAL  
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## **GEOSYNTEC 2023 RATE SCHEDULE**

**GEOSYNTEC CONSULTANTS, INC.**  
**2023 RATE SCHEDULE**

<u>Professional Services</u>	<u>Rate/Hour</u>
Staff Professional	\$154
Senior Staff Professional	\$178
Professional/Engineer	\$198
Project Professional (CQA Officer)	\$224
Senior Project Professional	\$254
Principal (Project Manager)	\$274
Senior Principal	\$294
<u>Technical/Field Services</u>	
Technician I	\$83
Technician II	\$89
Senior Technician I	\$99
Sr. Earthwork Technician-I (Standard Wage)	\$115
Sr. Earthwork Technician-I (Prevailing Wage)	\$128
Site Manager I	\$116
Sr. Geosynthetic Liner Technician-II (Standard Wage)	\$128
Sr. Geosynthetic Liner Technician-II (Prevailing Wage)	\$142
Construction Manager I	\$145
Construction Manager II	\$152
<u>Administrative Services</u>	
Senior Designer	\$190
Designer	\$160
Senior Drafter/Senior CADD Operator	\$145
Drafter/CADD Operator/Artist	\$130
Project Administrator	\$85
Clerical	\$65
Direct Expenses	12%
Subcontract Services	12%
Technology/Communications Fee	3%
Specialized Computer Applications (per hour)	\$15
Personal Automobile (per mile)	Current Gov't Rate
Field Vehicle	\$135
Per Diem Per Calendar Day	\$74
Lodging Per Calendar Day	\$225
Photocopies (per page)	\$0.09

Rates are client and project specific.

Unless otherwise agreed, rates will be adjusted annually based on a minimum of the Producer Price Index for Engineering Services.

Rates for field equipment, health and safety equipment, and graphical supplies presented upon request.

**EXHIBIT B**

**PAYMENT ARRANGEMENTS**

**Periodic Compensation**

- A. For CONTRACTOR services to be rendered under this Agreement, CONTRACTOR shall be paid a total contract amount, including cost reimbursements, not to exceed \$ **224,679**.
- B. Payment for services and /or reimbursement of costs shall be made upon CONTRACTOR's satisfactory performance, based upon the scope and methodology contained in **EXHIBIT A** as determined by COUNTY.
- C. Monthly, CONTRACTOR shall submit to the COUNTY DESIGNATED REPRESENTATIVE an invoice or certified claim on the County Treasury for the service performed over the period specified. These invoices or certified claims must cite the assigned Board Contract Number. COUNTY REPRESENTATIVE shall evaluate the quality of the service performed and if found to be satisfactory shall initiate payment processing. COUNTY shall pay invoices or claims for satisfactory work within 30 days of receipt of correct and complete invoices or claims from CONTRACTOR.
- D. COUNTY's failure to discover or object to any unsatisfactory work or billings prior to payment will not constitute a waiver of COUNTY's right to require CONTRACTOR to correct such work or billings or seek any other legal remedy.



## EXHIBIT C

### Indemnification and Insurance Requirements (For Design Professional Contracts)

#### INDEMNIFICATION

CONTRACTOR agrees to fully indemnify and hold harmless COUNTY and its officers, officials, employees, agents and volunteers from and against any and all claims, actions, losses, suits damages, costs, expenses, judgments and/or liabilities that arise out of, or pertain to, or relate to the negligence, recklessness, or willful misconduct of the CONTRACTOR and its employees, subcontractors, or agents in the performance of services under this Agreement. The indemnity includes the cost to defend COUNTY to the extent of the CONTRACTOR'S proportionate percentage of fault. Should one (or more) defendants be unable to pay its share of the defense costs due to bankruptcy or dissolution of the business, CONTRACTOR shall meet and confer with other parties regarding unpaid defense costs and CONTRACTOR shall pay County's cost of defense to the fullest extent permitted by law.

#### NOTIFICATION OF ACCIDENTS AND SURVIVAL OF INDEMNIFICATION PROVISIONS

CONTRACTOR shall notify COUNTY immediately in the event of any accident or injury arising out of or in connection with this Agreement. The indemnification provisions in this Agreement shall survive any expiration or termination of this Agreement.

#### INSURANCE

CONTRACTOR shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the CONTRACTOR, its agents, representatives, employees or subcontractors.

##### A. Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office (ISO) Form CG 00 01 covering CGL on an "occurrence" basis, including products-completed operations, personal & advertising injury, with limits no less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate.
2. **Automobile Liability:** Insurance Services Office Form Number CA 0001 covering, Code 1 (any auto), or if CONTRACTOR has no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than \$1,000,000 per accident for bodily injury and property damage.
3. **Workers' Compensation:** Insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease. **(Not required if CONTRACTOR provides written verification that it has no employees)**
4. **Professional Liability:** (Errors and Omissions) Insurance appropriate to the CONTRACTOR'S profession, with limit no less than \$2,000,000 per occurrence or claim, \$2,000,000 aggregate.

If the CONTRACTOR maintains broader coverage and/or higher limits than the minimums shown above, the COUNTY requires and shall be entitled to the broader coverage and/or the higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the COUNTY.

##### B. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

1. **Additional Insured** – COUNTY, its officers, officials, employees, agents and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the CONTRACTOR including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the CONTRACTOR'S insurance at least as broad as ISO Form CG 20 10 11 85 or both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 forms if later revisions used).
2. **Primary Coverage** – For any claims related to this contract, the CONTRACTOR'S insurance coverage shall be primary insurance primary coverage at least as broad as ISO CG 20 01 04 13 as respects the COUNTY, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the COUNTY, its officers, officials, employees, or volunteers shall be excess of the CONTRACTOR'S insurance and shall not contribute with it.
3. **Notice of Cancellation** – Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the COUNTY.
4. **Waiver of Subrogation Rights** – CONTRACTOR hereby grants to COUNTY a waiver of any right to subrogation which any insurer of said CONTRACTOR may acquire against the COUNTY by virtue of the payment of any loss under such insurance. CONTRACTOR agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the COUNTY has received a waiver of subrogation endorsement from the insurer.
5. **Deductibles and Self-Insured Retention** – Any deductibles or self-insured retentions must be declared to and approved by the COUNTY. The COUNTY may require the CONTRACTOR to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.
6. **Acceptability of Insurers** – Unless otherwise approved by Risk Management, insurance shall be written by insurers authorized to do business in the State of California and with a minimum A.M. Best's Insurance Guide rating of "A- VII".
7. **Verification of Coverage** – CONTRACTOR shall furnish the COUNTY with proof of insurance, original certificates and amendatory endorsements as required by this Agreement. The proof of insurance, certificates and endorsements are to be received and approved by the COUNTY before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the CONTRACTOR's obligation to provide them. The CONTRACTOR shall furnish evidence of renewal of coverage throughout the term of the Agreement. The COUNTY reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.
8. **Failure to Procure Coverage** – In the event that any policy of insurance required under this Agreement does not comply with the requirements, is not procured, or is canceled and not replaced, COUNTY has the right but not the obligation or duty to terminate the Agreement. Maintenance of required insurance coverage is a material element of the Agreement and failure to maintain or renew such coverage or to provide evidence of renewal may be treated by COUNTY as a material breach of contract.
9. **Subcontractors** – CONTRACTOR shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and CONTRACTOR shall ensure that COUNTY is an additional insured on insurance required from subcontractors.

**10. Claims Made Policies** – If any of the required policies provide coverage on a claims-made basis:

- i. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
- ii. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of contract work.
- iii. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the CONTRACTOR must purchase “extended reporting” coverage for a minimum of five (5) years after completion of contract work.

**11. Special Risks or Circumstances** – COUNTY reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Any change requiring additional types of insurance coverage or higher coverage limits must be made by amendment to this Agreement. CONTRACTOR agrees to execute any such amendment within thirty (30) days of receipt.

Any failure, actual or alleged, on the part of COUNTY to monitor or enforce compliance with any of the insurance and indemnification requirements will not be deemed as a waiver of any rights on the part of COUNTY.