



**LANDFILL GAS SERVICES  
FOR  
CENTRAL REGION LANDFILLS**

**CONTRACT #MA-299-18011418**

Recitals.....	4
---------------	---

## **ARTICLES .....PAGE**

### General Terms and Conditions

A. Governing Law and Venue.....	4
B. Entire Contract .....	4
C. Amendments .....	4
D. Taxes .....	5
E. Delivery.....	5
F. Acceptance/Payment .....	5
G. Warranty .....	5
H. Patent/Copyright Material/Propriety Infringement .....	5
I. Assignment.....	5
J. Non-Discrimination.....	5
K. Termination .....	5
L. Consent to Breach not Waiver.....	5
M. Independent Contractor .....	6
N. Performance .....	6
O. Insurance Provision .....	6
P. Changes .....	6
Q. Change of Ownership/Name, Litigation Status, Conflicts with County Interests .....	8
R. Force Majeure .....	8
S. Confidentiality.....	8
T. Compliance with Laws.....	9
U. Freight .....	9
V. Severability .....	9
W. Attorney Fees .....	9
X. Interpretation .....	9
Y. Employee Eligibility Verification .....	9
Z. Indemnification Provision .....	9
AA. Audits/Inspections .....	10
BB. Contingency of Funds .....	10
CC. Expenditure Limit .....	10

### Additional Terms and Conditions

1. Term.....	10
2. Project Manager-County .....	10
3. Contractor's Project Manager and Key Personnel .....	11
4. Entirety .....	11
5. Precedence.....	11
6. Compensation.....	11
7. Contractor's Expense .....	12
8. Changes/Extra Work/Modifications.....	12
9. Ownership of Documents.....	13
10. Data – Title To .....	13
11. Reports/Meetings .....	13
12. Records.....	13
13. Conflict of Interest. ....	13
14. Child Support Enforcement Requirements.....	13
15. Contractor Bankruptcy/Insolvency.....	14
16. Publication.....	14
17. Subject to Fiscal Appropriations. ....	14

18. Performance Surety .....	14
19. Breach of Contract .....	14
20. Interpretation of Contract .....	15
21. Disputes .....	15
22. Termination – Default .....	15
23. Termination – Convenience of the County. ....	16
24. Termination – Orderly .....	16
25. Errors and Omissions .....	16
26. Health and Safety Plan .....	16
27. County Declared Emergency.....	18
28. Notices.....	18
Model Contract Signature Page.....	19
Attachment 1 Health & Safety Plan Requirements .....	20

## **ATTACHMENTS**

A. Scope of Work.....	21
B. County Supplied Items & Resources.....	45
C. Cost/Compensation for Contractor Services .....	46
D. Subcontractor Services.....	60
G. Figure1A 3C.....	61-70

## LANDFILL GAS SERVICES FOR CENTRAL REGION LANDFILLS

This Contract Number MA-299-18011418 to provide Landfill Gas Services for Central Region Landfills ("**Contract**") is made and entered into upon execution of all necessary signatures between the County of Orange, a political subdivision of the State of California, by its OC Waste & Recycling department ("**County**") and **Tetra Tech BAS, Inc.**, ("**Contractor**"), with a principal office located at ~~1360 Valley Vista Drive, Diamond Bar, CA 91765~~ 21700 Copley Dr Ste 200, Diamond Bar, CA 91701. County and Contractor are collectively referred to as "Parties."

### RECITALS

**WHEREAS**, Contractor responded to a Request for Proposal (RFP) to provide Landfill Gas (LFG) Services for Central Region Landfills (Services); and

**WHEREAS**, the County Board of Supervisors has authorized the County Procurement Officer or authorized Deputy to enter into this Contract with Contractor to provide the Services for a three-year period, effective April 10, 2018 through April 9, 2021, in an amount not to exceed \$7,500,000; and

**WHEREAS**, Contractor agrees to provide the Services as more specifically described in the Scope of Work, attached hereto as Attachment A and incorporated herein; and

**WHEREAS**, County agrees to pay Contractor the fees as further set forth in Cost/Compensation for Contractor Services, attached hereto as Attachment C and incorporated herein; and

**WHEREAS**, unforeseen major repairs and required upgrades to the existing gas collection system at Frank R. Bowerman Landfill had to be constructed in 2019 to ensure compliance with stringent regulatory requirements; and

**WHEREAS**, County now desires to increase the Contract monetary limit by \$2,400,000, for a revised cumulative Contract total not to exceed \$9,900,000, in order to continue to provide routine and non-routine LFG Services as provided for in the Scope of Work, including special projects at the Frank R. Bowerman Landfill and closed site Santiago Canyon Landfill to maintain compliance with state and federal regulatory requirements; and

**WHEREAS**, County now desires to amend Article Q of the County General Terms and Conditions, in its entirety, as follows and incorporated herein:

**Change of Ownership/Name, Litigation Status, Conflicts with County Interests:**

Contractor agrees that if there is a change or transfer in ownership of Contractor's business prior to completion of this Contract, and the County agrees to an assignment of the Contract, the new owners shall be required under the terms of sale or other instruments of transfer to assume Contractor's duties and obligations contained in this Contract and complete them to the satisfaction of the County.

County reserves the right to immediately terminate the Contract in the event the County determines that the assignee is not qualified or is otherwise unacceptable to the County for the provision of services under the Contract.

In addition, Contractor has the duty to notify the County in writing of any change in the Contractor's status with respect to name changes that do not require an assignment of the Contract. The Contractor is also obligated to notify the County in writing if the Contractor becomes a party to any litigation against the County, or a party to litigation

that may reasonably affect the Contractor's performance under the Contract, as well as any potential conflicts of interest between Contractor and County that may arise prior to or during the period of Contract performance. While Contractor will be required to provide this information without prompting from the County any time there is a change in Contractor's name, conflict of interest or litigation status, Contractor must also provide an update to the County of its status in these areas whenever requested by the County.

The Contractor shall exercise reasonable care and diligence to prevent any actions or conditions that could result in a conflict with County interests. In addition to the Contractor, this obligation shall apply to the Contractor's employees, agents, and subcontractors associated with the provision of goods and services provided under this Contract. The Contractor's efforts shall include, but not be limited to establishing rules and procedures preventing its employees, agents, and subcontractors from providing or offering gifts, entertainment, payments, loans or other considerations which could be deemed to influence or appear to influence County staff or elected officers in the performance of their duties; and

**WHEREAS**, Contractor has confirmed in writing that they understand and are in compliance with the County's Conflict of Interest Policy as stated in Article Q herein; and

**WHEREAS**, the Silverado Fire on October 26, 2020 caused significant damage to the LFG System at the Frank R. Bowerman Landfill requiring extensive repairs; and

**WHEREAS**, County now desires to immediately increase the Contract in the amount of \$2,500,000, effective upon Board approval and execution of all necessary signatures, for a revised cumulative Contract total not to exceed \$12,400,000, in order to repair the damages sustained in the Silverado Fire; and

**WHEREAS**, County now desires to renew the Contract, effective April 10, 2021 through April 9, 2022, in an amount not to exceed \$2,500,000, for a revised cumulative Contract total not to exceed \$14,900,000;

**NOW, THEREFORE**, for and in consideration of the professional services and mutual promises to be performed for the County by the Contractor in connection with the Services and the compensation to be paid for such Services and mutual promises by the County, the Parties agree as follows:

## **ARTICLES**

### **GENERAL TERMS AND CONDITIONS**

- A. **Governing Law and Venue:** This Contract has been negotiated and executed in the state of California and shall be governed by and construed under the laws of the state of California. In the event of any legal action to enforce or interpret this Contract, the sole and exclusive venue shall be a court of competent jurisdiction located in Orange County, California, and the Parties hereto agree to and do hereby submit to the jurisdiction of such court, notwithstanding Code of Civil Procedure section 394. Furthermore, the Parties specifically agree to waive any and all rights to request that an action be transferred for trial to another County.
- B. **Entire Contract:** This Contract contains the entire Contract between the parties with respect to the matters herein, and there are no restrictions, promises, warranties or undertakings other than those set forth herein or referred to herein. No exceptions, alternatives, substitutes or revisions are valid or binding on County unless authorized by County in writing. Electronic acceptance of any additional terms, conditions or supplemental Contracts by any County employee or agent, including but not limited to installers of software, shall not be valid or binding on County unless accepted in writing by County's Purchasing Agent or designee.

- C. **Amendments:** No alteration or variation of the terms of this Contract shall be valid unless made in writing and signed by the Parties; no oral understanding or agreement not incorporated herein shall be binding on either of the Parties; and no exceptions, alternatives, substitutes or revisions are valid or binding on County unless authorized by County in writing.
- D. **Taxes:** Unless otherwise provided herein or by law, price quoted does not include California state sales or use tax. Out-of-state Contractors shall indicate California Board of Equalization permit number and sales permit number on invoices, if California sales tax is added and collectable. If no permit numbers are shown, sales tax will be deducted from payment. The Auditor-Controller will then pay use tax directly to the State of California in lieu of payment of sales tax to the Contractor.
- E. **Delivery:** Time of delivery of goods or services is of the essence in this Contract. County reserves the right to refuse any goods or services and to cancel all or any part of the goods not conforming to applicable specifications, drawings, samples or descriptions or services that do not conform to the prescribed statement of work. Acceptance of any part of the order for goods shall not bind County to accept future shipments nor deprive it of the right to return goods already accepted at Contractor's expense. Over shipments and under shipments of goods shall be only as agreed to in writing by County. Delivery shall not be deemed to be complete until all goods or services have actually been received and accepted in writing by County.
- F. **Acceptance/Payment:** Unless otherwise agreed to in writing by County, 1) acceptance shall not be deemed complete unless in writing and until all the goods/services have actually been received, inspected, and tested to the satisfaction of County, and 2) payment shall be made in arrears after satisfactory acceptance.
- G. **Warranty:** Contractor expressly warrants that the goods covered by this Contract are 1) free of liens or encumbrances, 2) merchantable and good for the ordinary purposes for which they are used, and 3) fit for the particular purpose for which they are intended. Acceptance of this order shall constitute an agreement upon Contractor's part to indemnify, defend and hold County and its indemnitees as identified in paragraph "Z" below, and as more fully described in paragraph "Z," harmless from liability, loss, damage and expense, including reasonable counsel fees, incurred or sustained by County by reason of the failure of the goods/services to conform to such warranties, faulty work performance, negligent or unlawful acts, and non-compliance with any applicable state or federal codes, ordinances, orders, or statutes, including the Occupational Safety and Health Act (OSHA) and the California Industrial Safety Act. Such remedies shall be in addition to any other remedies provided by law.
- H. **Patent/Copyright Materials/Proprietary Infringement:** Unless otherwise expressly provided in this Contract, Contractor shall be solely responsible for clearing the right to use any patented or copyrighted materials in the performance of this Contract. Contractor warrants that any software as modified through services provided hereunder will not infringe upon or violate any patent, proprietary right, or trade secret right of any third party. Contractor agrees that, in accordance with the more specific requirement contained in paragraph "Z" below, it shall indemnify, defend and hold County and County indemnitees harmless from any and all such claims and be responsible for payment of all costs, damages, penalties and expenses related to or arising from such claim(s), including, costs and expenses but not including attorney's fees.
- I. **Assignment:** The terms, covenants, and conditions contained herein shall apply to and bind the heirs, successors, executors, administrators and assigns of the Parties. Furthermore, neither the performance of this Contract nor any portion thereof may be assigned by Contractor without the express written consent of County. Any attempt by Contractor to assign the performance or any portion thereof of this Contract without the express written consent of County shall be invalid and shall constitute a breach of this Contract.
- J. **Non-Discrimination:** In the performance of this Contract, Contractor agrees that it will comply with the requirements of Section 1735 of the California Labor Code and not engage nor permit any subcontractors to engage in discrimination in employment of persons because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, or sex of such persons. Contractor

acknowledges that a violation of this provision shall subject Contractor to penalties pursuant to Section 1741 of the California Labor Code.

- K. **Termination:** In addition to any other remedies or rights it may have by law, County has the right to immediately terminate this Contract without penalty for cause or after 30 days' written notice without cause, unless otherwise specified. Cause shall be defined as any material breach of Contract, any misrepresentation or fraud on the part of the Contractor. Exercise by County of its right to terminate the Contract shall relieve County of all further obligation.
- L. **Consent to Breach Not Waiver:** No term or provision of this Contractor shall be deemed waived and no breach excused, unless such waiver or consent shall be in writing and signed by the party claimed to have waived or consented. Any consent by any party to, or waiver of, a breach by the other, whether express or implied, shall not constitute consent to, waiver of, or excuse for any other different or subsequent breach.
- M. **Independent Contractor:** Contractor shall be considered an independent Contractor and neither Contractor, its employees, nor anyone working under Contractor shall be considered an agent or an employee of County. Neither Contractor, its employees, nor anyone working under Contractor, shall qualify for workers' compensation or other fringe benefits of any kind through County.
- N. **Performance:** Contractor shall warrant all work under this Contract, taking necessary steps and precautions to perform the work to County's satisfaction. Contractor shall be responsible for the professional quality, technical assurance, timely completion and coordination of all documentation and other goods/services furnished by the Contractor under this Contract. Contractor shall perform all work diligently, carefully, and in a good and workmanlike manner; shall furnish all necessary labor, supervision, machinery, equipment, materials, and supplies, shall at its sole expense obtain and maintain all permits and licenses required by public authorities, including those of County required in its governmental capacity, in connection with performance of the work. If permitted to subcontract, Contractor shall be fully responsible for all work performed by subcontractors.
- O. **Insurance Provision:** Prior to the provision of services under this Contract, the Contractor agrees to purchase all required insurance at Contractor's expense, including all endorsements required herein, necessary to satisfy the County that the insurance provisions of this Contract have been complied with. Contractor agrees to keep such insurance coverage, Certificates of Insurance, and endorsements on deposit with the County during the entire term of this Contract. In addition, all subcontractors performing work on behalf of Contractor pursuant to this Contract shall obtain insurance subject to the same terms and conditions as set forth herein for Contractor.

Contractor shall ensure that all subcontractors performing work on behalf of Contractor pursuant to this Contract shall be covered under Contractor's insurance as an Additional Insured or maintain insurance subject to the same terms and conditions as set forth herein for Contractor. Contractor shall not allow subcontractors to work if subcontractors have less than the level of coverage required by County from Contractor under this Contract. It is the obligation of Contractor to provide notice of the insurance requirements to every subcontractor and to receive proof of insurance prior to allowing any subcontractor to begin work. Such proof of insurance must be maintained by Contractor through the entirety of this Contract for inspection by County representative(s) at any reasonable time.

All self-insured retentions (SIRs) shall be clearly stated on the Certificate of Insurance. Any self-insured retention (SIR) in an amount in excess of Fifty Thousand Dollars (\$50,000) shall specifically be approved by the County's Risk Manager, or designee, upon review of Contractor's current audited financial report. If Contractor's SIR is approved, Contractor, in addition to, and without limitation of, any other indemnity provision(s) in this Contract, agrees to all of the following:

- 1) In addition to the duty to indemnify and hold the County harmless against any and all liability, claim, demand or suit resulting from Contractor's, its agents, employee's or subcontractor's performance of this

Contract, Contractor shall defend the County at its sole cost and expense with counsel approved by Board of Supervisors against same: and

- 2) Contractor's duty to defend, as stated above, shall be absolute and irrespective of any duty to indemnify or hold harmless; and
- 3) The provisions of California Civil Code Section 2860 shall apply to any and all actions to which the duty to defend stated above applies, and the Contractor's SIR provision shall be interpreted as though the Contractor was an insurer and the County was the insured.

If the Contractor fails to maintain insurance acceptable to the County for the full term of this Contract, the County may terminate this Contract.

### **Qualified Insurer**

The policy or policies of insurance must be issued by an insurer with a minimum rating of A- (Secure A.M. Best's Rating) and VIII (Financial Size Category as determined by the most current edition of the **Best's Key Rating Guide/Property-Casualty/United States or ambest.com**). It is preferred, but not mandatory, that the insurer be licensed to do business in the state of California (California Admitted Carrier).

If the insurance carrier does not have an A.M. Best Rating of A-/VIII, the CEO/Office of Risk Management retains the right to approve or reject a carrier after a review of the company's performance and financial ratings.

The policy or policies of insurance maintained by the Contractor shall provide the minimum limits and coverage as set forth below:

<b><u>Coverage</u></b>	<b><u>Minimum Limits</u></b>
Commercial General Liability	\$1,000,000 per occurrence \$2,000,000 aggregate
Automobile Liability including coverage for owned, non-owned and hired vehicles	\$1,000,000 per occurrence
Workers Compensation	Statutory
Employers Liability Insurance	\$1,000,000 per occurrence

### **Required Coverage Forms**

The Commercial General Liability coverage shall be written on Insurance Services Office (ISO) form CG 00 01, or a substitute form providing liability coverage at least as broad.

The Business Auto Liability coverage shall be written on ISO form CA 00 01, CA 00 05, CA 0012, CA 00 20, or a substitute form providing coverage at least as broad.

### **Required Endorsements**

The Commercial General Liability policy shall contain the following endorsements, which shall accompany the Certificate of Insurance:



- 1) An Additional Insured endorsement using ISO form CG 20 26 04 13 or a form at least as broad naming the ***County of Orange its elected and appointed officials, officers, agents and employees*** as Additional Insureds, or provided blanket coverage, which will state **AS REQUIRES BY WRITTEN CONTRACT**.
- 2) A primary non-contributing endorsement using ISO form CG 20 01 04 13, or a form at least as broad evidencing that the Contractor's insurance is primary and any insurance or self-insurance by the County of Orange shall be excess and non-contributing.

The Workers' Compensation policy shall contain a waiver of subrogation endorsement waiving all rights of subrogation against the ***County of Orange, its elected and appointed officials, officers, agents and employees*** or provide blanket coverage, which will state **AS REQUIRED BY WRITTEN CONTRACT**.

All insurance policies required by this Contract shall waive all rights of subrogation against the County of Orange, its elected and appointed officials, officers, agents and employees when acting within the scope of their appointment or employment.

Contractor shall notify County in writing within thirty (30) days of any policy cancellation and ten (10) days for non-payment of premium and provide a copy of the cancellation notice to County. Failure to provide written notice of cancellation may constitute a material breach of the Contract, upon which the County may suspend or terminate this Contract.

The Commercial General Liability policy shall contain a severability of interests clause also known as a "separation of insureds" clause (standard in the ISO CG 0001 policy).

Insurance certificates should be forwarded to the department address listed on the solicitation.

If the Contractor fails to provide the insurance certificates and endorsements within seven (7) days of notification by CEO/Purchasing or the department purchasing division, award may be made to the next qualified vendor.

County expressly retains the right to require Contractor to increase or decrease insurance of any of the above insurance types throughout the term of this Contract. Any increase or decrease in insurance will be as deemed by County of Orange Risk Manager as appropriate to adequately protect County.

County shall notify Contractor in writing of changes in the insurance requirements. If Contractor does not deposit copies of acceptable Certificates of Insurance and endorsements with County incorporating such changes within thirty (30) days of receipt of such notice, this Contract may be in breach without further notice to Contractor, and County shall be entitled to all legal remedies.

The procuring of such required policy or policies of insurance shall not be construed to limit Contractor's liability hereunder nor to fulfill the indemnification provisions and requirements of this Contract, nor act in any way to reduce the policy coverage and limits available from the insurer.

- P. **Changes:** Contractor shall make no changes in the work or perform any additional work without the County's specific written approval.
- Q. **Change of Ownership:** ~~Contractor agrees that if there is a change or transfer in ownership of Contractor's business prior to completion of this Contract, and the County agrees to an assignment of the Contract, the new owners shall be required under terms of sale or other transfer to assume Contractor's duties and obligations contained in this Contract and complete them to the satisfaction of the County. County reserves the right to immediately terminate the Contract in the event the County determines that the assignee is not qualified or is otherwise unacceptable to the County for the provision of services under the Contract.~~
- R. **Force Majeure:** Contractor shall not be assessed with liquidated damages or unsatisfactory performance penalties

during any delay beyond the time named for the performance of this Contract caused by any act of God, war, civil disorder, employment strike or other cause beyond its reasonable control, provided Contractor gives written notice of the cause of the delay to County within 36 hours of the start of the delay and Contractor avails himself of any available remedies.

- S. **Confidentiality:** Contractor agrees to maintain the confidentiality of all County and County-related records and information pursuant to all statutory laws relating to privacy and confidentiality that currently exist or exist at any time during the term of this Contract. All such records and information shall be considered confidential and kept confidential by Contractor and Contractor's staff, agents and employees.
- T. **Compliance with Laws:** Contractor represents and warrants that services to be provided under this Contract shall fully comply, at Contractor's expense, with all standards, laws, statutes, restrictions, ordinances, requirements, and regulations (collectively "laws"), including, but not limited to those issued by County in its governmental capacity and all other laws applicable to the services at the time services are provided to and accepted by County. Contractor acknowledges that County is relying on Contractor to ensure such compliance, and pursuant to the requirements of paragraph "Z" below, Contractor agrees that it shall defend, indemnify and hold County and County INDEMNITEES harmless from all liability, damages, costs and expenses arising from or related to a violation of such laws.
- U. **Freight:** Prior to the County's express acceptance of delivery of products, Contractor assumes full responsibility for all transportation, transportation scheduling, packing, handling, insurance, and other services associated with delivery of all products deemed necessary under this Contract.
- V. **Severability:** If any term, covenant, condition or provision of this Contract is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder of the provisions hereof shall remain in full force and effect and shall in no way be affected, impaired or invalidated thereby.
- W. **Attorney Fees:** In any action or proceeding to enforce or interpret any provision of this Contract, each party shall bear their own attorney's fees, costs and expenses.
- X. **Interpretation:** This Contract has been negotiated at arm's length and between persons sophisticated and knowledgeable in the matters dealt with in this Contract. In addition, each party had been represented by experienced and knowledgeable independent legal counsel of their own choosing or has knowingly declined to seek such counsel despite being encouraged and given the opportunity to do so. Each party further acknowledges that they have not been influenced to any extent whatsoever in executing this Contract by any other party hereto or by any person representing them, or both. Accordingly, any rule or law (including California Civil Code Section 1654) or legal decision that would require interpretation of any ambiguities in this Contract against the party that has drafted it is not applicable and is waived. The provisions of this Contract shall be interpreted in a reasonable manner to effect the purpose of the parties and this Contract.
- Y. **Employee Eligibility Verification:** The Contractor warrants that it fully complies with all Federal and State statutes and regulations regarding the employment of aliens and others and that all its employees performing work under this Contract meet the citizenship or alien status requirement set forth in Federal statutes and regulations. The Contractor shall obtain, from all employees performing work hereunder, all verification and other documentation of employment eligibility status required by Federal or State statutes and regulations including, but not limited to, the Immigration Reform and Control Act of 1986, 8 U.S.C. §1324 et seq., as they currently exist and as they may be hereafter amended. The Contractor shall retain all such documentation for all covered employees for the period prescribed by the law. The Contractor shall indemnify, defend with counsel approved in writing by County, and hold harmless, the County, its agents, officers, and employees from employer sanctions and any other liability which may be assessed against the Contractor or the County or both in connection with any alleged violation of any Federal or State statutes or regulations pertaining to the eligibility for employment of any persons performing work under this Contract.

- Z. **Indemnification:** Contractor agrees to indemnify, defend with counsel approved in writing by County, and hold County, its elected and appointed officials, officers, employees, agents and those special districts and agencies which County's Board of Supervisors acts as the governing Board ("County Indemnitees") harmless from any claims, demands or liability of any kind or nature, including but not limited to personal injury or property damage, arising from or related to the services, products or other performance provided by Contractor pursuant to this Contract. If judgment is entered against Contractor and County by a court of competent jurisdiction because of the concurrent active negligence of County or County Indemnitees, Contractor and County agree that liability will be apportioned as determined by the court. Neither party shall request a jury apportionment.
- AA. **Audits/Inspections:** Contractor agrees to permit the County's Auditor-Controller or the Auditor-Controller's authorized representative (including auditors from a private auditing firm hired by the County) access during normal working hours to all books, accounts, records, reports, files, financial records, supporting documentation, including payroll and accounts payable/receivable records, and other papers or property of Contractor for the purpose of auditing or inspecting any aspect of performance under this Contract. The inspection and/or audit will be confined to those matters connected with the performance of the Contract including, but not limited to, the costs of administering the Contract. The County will provide reasonable notice of such an audit or inspection.
- The County reserves the right to audit and verify the Contractor's records before final payment is made.
- Contractor agrees to maintain such records for possible audit for a minimum of three years after final payment, unless a longer period of records retention is stipulated under this Contract or by law. Contractor agrees to allow interviews of any employees or others who might reasonably have information related to such records. Further, Contractor agrees to include a similar right to the County to audit records and interview staff of any subcontractor related to performance of this Contract.
- Should the Contractor cease to exist as a legal entity, the Contractor's records pertaining to this Contract shall be forwarded to the County's project manager.
- BB. **Contingency of Funds:** Contractor acknowledges that funding or portions of funding for this Contract may be contingent upon state budget approval; receipt of funds from, and/or obligation of funds by, the state of California to County; and inclusion of sufficient funding for the services hereunder in the budget approved by County's Board of Supervisors for each fiscal year covered by this Contract. If such approval, funding or appropriations are not forthcoming, or are otherwise limited, County may immediately terminate or modify this Contract without penalty.
- CC. **Expenditure Limit:** The Contractor shall notify the County of Orange assigned Deputy Purchasing Agent in writing when the expenditures against the Contract reach 75 percent of the dollar limit on the Contract. The County will not be responsible for any expenditure overruns and will not pay for work exceeding the dollar limit on the Contract unless a change order to cover those costs has been issued.

## **Additional Terms and Conditions**

### **1. Term**

The effective date of this Contract is April 10, 2018, to continue for three (3) consecutive years through April 9, 2021, in an amount not to exceed ~~\$7,500,000~~ \$12,400,000 with an option to renew the Contract for two additional one-year periods, increasing the monetary limit by \$2,500,000 each additional year, with excess funds to be carried over from year to year not to exceed the revised cumulative Contract total. Any extension of this Contract may require approval by the County's Board of Supervisors.

### **2. Project Manager-County**

The County shall appoint a Project Manager to act as liaison between the County and the Contractor during the term of this Contract. The County's Project Manager (County PM) shall coordinate the activities of the County

staff assigned to work with the Contractor.

The County PM shall have the right to require the removal and replacement of the Contractor's Project Manager and key personnel. The County PM shall notify the Contractor in writing of such action. The Contractor shall accomplish the removal within 14 calendar days after written notice by the County PM. The County PM shall review and approve the appointment of the replacement for the Contractor's Project Manager and key personnel. Said approval shall not be unreasonably withheld.

### **3. Contractor's Project Manager and Key Personnel**

Contractor shall appoint a Project Manager to direct the Contractor's efforts in fulfilling Contractor's obligations under this Contract. This Project Manager shall be subject to approval by the County and shall not be changed without written consent of the County PM, which consent shall not be unreasonably withheld.

The Contractor's Project Manager and key personnel shall be assigned to this project for the duration of this Contract and shall diligently pursue all work and services to meet the project time lines. Key personnel are those individuals who report directly to the Contractor's Project Manager.

### **4. Entirety**

This Contract and all of its Attachments and Exhibits comprise the entire Contract between the Contractor and the County. Additional or new terms contained in this Contract, which vary from the Contractor's proposal, are deemed accepted by the Contractor by execution of this Contract or other commencement of performance hereunder. All previous proposals, offers, discussions, preliminary understandings, and other communications relative to this Contract, oral or written, are hereby superseded, except to the extent that they have incorporated into this Contract. No future waiver of, exception to, addition to, or alteration of any of the terms, conditions and/or provisions of this Contract shall be considered valid unless specifically agreed to in writing by both Parties.

### **5. Precedence**

The documents herein consist of this Contract and its attachments and exhibits. In the event of a conflict between or among the Contract documents, the order of precedence shall be the provisions of the main body of this Contract, i.e., those provisions set forth in the recitals and articles of this Contract, and then the attachments and exhibits.

### **6. Compensation**

This is a fixed ceiling, time and materials Contract. Contractor agrees to accept the specified compensation set forth in Exhibit C, Cost/Compensation for Contractor Services, as full remuneration for performing all services and furnishing all staffing and materials called for; and for any reasonably foreseeable difficulties which may arise or be encountered in the execution of the services until acceptance; and for risks connected with the services; and for performance by the Contractor of all of its duties and obligations hereunder.

**Prevailing Wage (as applicable):** As set forth in Section 1771 of the Labor Code, prevailing wage requirements shall apply to this Contract. California Code of Regulations (CCR) Title 8, Article 2, Section 16001 (a) and (f) also provide that prevailing wage requirements apply to this Contract. Contractor shall comply with all the provisions of the applicable sections of the Labor Code on prevailing wage and Article 2 Title 8 Section 16001 (a) and (f) of the CCR. Contractor shall also be responsible for compliance by his subcontractors to these provisions.

Pursuant to the provisions of Section 1773 of the Code of the State of California, the Board of Supervisors has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime

work in this locality for each craft, classification, or type of worker needed to execute this Contract from the Director of the Department of Industrial Relations. Copies of these rates may be obtained from the State Industrial Relations Department Division of Labor, website [www.dir.ca.gov](http://www.dir.ca.gov); Statistics & Research (415/972-8620) or the Department of Transportation (916/445-3520). Contractor shall post a copy of such wage rates at the job site and shall pay the adopted prevailing wage rates at a minimum. The provisions of Sections 1774, 1775, 1776, and 1813 of the Labor Code shall be complied with.

**Wage Rate Penalty:** Pursuant to the provisions of Section 1775 of the Labor Code, Contractor shall forfeit to County, as a penalty, the sum of \$50 for each calendar day, or portion thereof, for each laborer, worker, or mechanic employed, paid less than the stipulated prevailing rates for any work done under this Contract, by Contractor or by any Contractor's subcontractors, in violation of the provisions of this Contract.

**Payroll Records:** Pursuant to the provisions of Section 1776 of the Labor Code:

- a. Contractor and each subcontractor performing any portion of the work under this Contract shall keep an accurate record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by Contractor in connection with the work.
- b. Said payroll records shall be certified and shall be available for inspection at the principal office of Contractor on the basis set forth in Labor Code Section 1776.
- c. Contractor shall file a certified copy of said payroll records with County within ten days after receipt of a written request therefore from OC Waste & Recycling or otherwise from County.
- d. Contractor shall inform County of the location of said payroll records, including the street address, City and County, and shall, within five working days, provide a notice of change of location and address of said payroll records.
- e. It shall be the responsibility of Contractor to ensure the compliance with the provisions of this Clause and the provisions of Labor Code Section 1776.
- f. In the event of noncompliance with the requirements of this Clause of the requirements of Labor Code Section 1776, Contractor shall have ten days in which to comply subsequent to receipt of written notice specifying in what respects Contractor must comply. Should noncompliance exist after said ten-day period, Contractor shall, as a penalty to County, forfeit \$25 for each calendar day, or portion thereof, for each worker to whom the noncompliance pertains, until strict compliance is effectuated. Contractor acknowledges that, without limitation as to other remedies of enforcement available to County, upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement of the California Department of Industrial Relations, such penalties shall be withheld from invoice payments due Contractor for completed task orders.

## **7. Contractor's Expense**

The Contractor will be responsible for all costs related to photocopying, telephone communications, fax communications, and parking while on County sites during the performance of work and services under this Contract.

## **8. Changes/Extra Work/Modifications**

The Contractor shall make no changes in this Agreement without the County's written consent. In the event that there are new or unforeseen requirements, the County with the Contractor's concurrence has the discretion to request official changes at any time without changing the intent of this Contract.

If County-initiated changes affect price, the Contractor's ability to deliver services or the project schedule, the Contractor shall give the County written notice no later than seven calendar days from the date the change was proposed and the Contractor was notified of the change. Such changes shall be agreed to in writing and incorporated into a Contract modification before becoming effective. Said modification shall be issued by the Deputy Purchasing

Agent or his designee and may be subject to approval by the County Board of Supervisors. Nothing herein shall prohibit the Contractor from proceeding with the work set forth in Attachment A, Scope of Work.

All extra services are by mutual consent of all Parties and may be subject to the approval of the County Board of Supervisors.

#### **9. Ownership of Documents**

The County has permanent ownership of all directly connected and derivative materials produced under this Contract by the Contractor. All documents, reports and other incidental or derivative work or materials furnished hereunder shall become and remain the sole properties of the County and may be used by the County as it may require without additional cost to the County. None of the documents, reports and other incidental or derivative work or furnished materials shall be used by the Contractor without the express written consent of the County.

#### **10. Data – Title to**

All materials, documents, data or information obtained from the County data files or any County medium furnished to the Contractor in the performance of this Contract will at all times remain the property of the County. Such data or information may not be used or copied for direct or indirect use by the Contractor after completion or termination of this Contract without the express written consent of the County. All materials, documents, data or information, including copies, shall be returned to the County at the end of this Contract.

#### **11. Reports/Meetings**

The Contractor shall develop reports and any other relevant documents necessary to complete the services and requirement as set forth in this Contract. The County's Project Manager and the Contractor's Project Manager will meet on reasonable notice to discuss the Contractor's performance and progress under this Contract. If requested, Contractor's Project Manager and other project personnel shall attend all meetings. The Contractor shall provide such information that is requested by the County for the purpose of monitoring progress under this Contract. Meetings held between OC Waste & Recycling staff and Contractor's staff to discuss Contractor's non-performance or lack thereof shall not be billable to the County.

#### **12. Records**

Contractor shall keep an accurate record of time expended by Contractor and/or Subcontractors working for Contractor in the performance of this Contract. Such record shall be available for periodic inspection by the County at reasonable times.

#### **13. Conflict of Interest**

The Contractor shall exercise reasonable care and diligence to prevent any actions or conditions that could result in a conflict with the best interests of the County. This obligation shall apply to the Contractor; the Contractor's employees, agents, and relatives; sub-tier Contractors; and third parties associated with accomplishing work and services hereunder. The Contractor's efforts shall include, but not be limited to establishing precautions to prevent its employees or agents from making, receiving, providing or offering gifts, entertainment, payments, loans or other considerations which could be deemed to appear to influence individuals to act contrary to the best interests of the County.

The County of Orange Board of Supervisors policy prohibits its employees from engaging in activities involving a conflict of interest. The Contractor shall not, during the period of this Contract, employ any County employee for any purpose.

**14. Child Support Enforcement Requirements**

Contractor certifies it is in full compliance with all applicable federal and state reporting requirements regarding its employees and with all lawfully served Wage and Earnings Assignment Orders and Notices of Assignments and will continue to be in compliance throughout the term of the Contract with the County of Orange. Failure to comply shall constitute a material breach of the Contract and failure to cure such breach within 60 calendar days of notice from the County shall constitute grounds for termination of the Contract.

**15. Contractor Bankruptcy/Insolvency**

If the Contractor should be adjudged bankrupt or should have a general assignment for the benefit of its creditors or if a receiver should be appointed on account of the Contractor's insolvency, the County may terminate this Contract.

**16. Publication**

No copies of sketches, schedules, written documents, computer based data, photographs, maps or graphs, including graphic art work, resulting from performance or prepared in connection with this Contract, are to be released by Contractor and/or anyone acting under the supervision of Contractor to any person, partnership, company, corporation, or agency, without prior written approval by the County, except as necessary for the performance of the services of this Contract. All press releases, including graphic display information to be published in newspapers, magazines, etc., are to be administered only by the County unless otherwise agreed to by both Parties.

**17. Subject to Fiscal Appropriations**

This Contract is subject to and contingent upon applicable budgetary appropriations being approved by the County of Orange Board of Supervisors for each fiscal year during the term of this Contract. If such appropriations are not approved, this Contract will be terminated without penalty to the County.

**18. Performance Surety**

In the event the County determines that a **task order** requires a surety bond, within ten (10) calendar days of notification by the County, Contractor will furnish a surety bond in an amount equal to 100% of the task order amount. Said bonds shall be in the form of the models to be provided by the County and be approved by the County Counsel and Risk Manager of the County Of Orange. Such bonds shall be executed by an admitted surety insurer (authorized to transact surety insurance in California); if the bonds are issued through a surplus line broker, both the surplus line broker and the insurer with whom he is doing business for purposes of this project must be licensed in California to issue such bonds.

If any surety upon any bond furnished in connection with this Contract becomes unacceptable to the County, or if any such surety fails to furnish reports as to surety's financial condition from time to time as requested by OC Waste & Recycling, Contractor shall promptly furnish such additional security as may be required by OC Waste & Recycling or the Board of Supervisors from time to time to protect the interests of County and of persons supplying labor or material in the prosecution of the work contemplated by this Contract. Failure to furnish such additional security shall constitute a material breach of the Contract.

The County shall return the Bond to the Contractor upon successful completion of Contractor's duties and obligations under this Contract.

Submit Bonds to:  
OC Waste & Recycling  
300 N. Flower St., Ste. 400

Santa Ana, CA 92703  
Attn: Purchasing Manager  
Re: Bonds for Contract No. MA-299-18011418

## **19. Breach of Contract**

The failure of the Contractor to comply with any of the provisions, covenants or conditions of this Contract shall be a material breach of this Contract. In such event the County may, and in addition to any other remedies available at law, in equity, or otherwise specified in this Contract:

- a. Afford the Contractor written notice of the breach and ten calendar days or such shorter time that may be specified in this Contract within which to cure the breach; and
- b. Discontinue payment to the Contractor for and during the period in which the Contractor is in breach; and
- c. Offset against any monies billed by the Contractor but yet unpaid by the County those monies disallowed pursuant to the above.

## **20. Interpretation of Contract**

In the event of a conflict or question involving the provisions of any part of this Contract, interpretation and clarification as necessary shall be determined by the County's Project Manager. If disagreement exists between the Contractor and the County's Project Manager in interpreting the provision(s), final interpretation and clarification shall be determined by the County's Purchasing Agent or his designee.

## **21. Disputes**

- A. The Parties shall deal in good faith and attempt to resolve potential disputes informally. If the dispute concerning a question of fact arising under the terms of this Contract is not disposed of in a reasonable period of time by the Contractor's Project Manager and the County's Project Manager, such matter shall be brought to the attention of the County's Purchasing Agent by way of the following process:
  1. The Contractor shall submit to County Project Manager a written demand for a final decision regarding the disposition of any dispute between the Parties arising under, related to, or involving this Contract, unless the County, on its own initiative, has already rendered such a final decision.
  2. The Contractor's written demand shall be fully supported by factual information, and, if such demand involves a cost adjustment to the Contract, the Contractor shall include with the demand a written statement signed by a senior official indicating that the demand is made in good faith, that the supporting data are accurate and complete, and that the amount requested accurately reflects the Contract adjustment for which the Contractor believes the County is liable.
- B. Pending the final resolution of any dispute arising under, related to, or involving this Contract, the Contractor agrees to diligently proceed with the performance of this Contract, including the delivery of goods and/or provision of services. The Contractor's failure to diligently proceed shall be considered a material breach of this Contract.

Any final decision of the County shall be expressly identified as such, shall be in writing, and shall be signed by the County's Purchasing Agent or his designee. If the County fails to render a decision within 90 days after receipt of the Contractor's demand, it shall be deemed a final decision adverse to the Contractor's contentions. The County's final decision shall be conclusive and binding regarding the dispute unless the Contractor commences action in a court of competent jurisdiction.

## **22. Termination -- Default**



If Contractor is in default of any of its obligations under this Contract and has not commenced cure within ten (10) days after receipt of a written notice of default from County and cured such default within the time specified in the notice, the County shall immediately be entitled to either commence resolution in accordance with this paragraph or to terminate this Contract by giving written notice to take effect immediately. Default shall include failure to carry out any of the requirements of this Contract, including, but not limited to not providing enough properly skilled workers or proper materials, persistently disregarding laws and or ordinances, not proceeding with the work as agreed to herein, or otherwise substantially violating any provision of this Contract. Upon termination of the Contract with Contractor, the County may begin negotiations with a third-party Contractor to provide goods and/or services as specified in this Contract.

The right of either party to terminate this Contract hereunder shall not be affected in any way by its waiver of or failure to take action with respect to any previous default.

### **23. Termination -- Convenience of the County**

Notwithstanding any other provision of the Contract, County may at any time and without cause terminate in whole or in part, upon not less than thirty (30) days written notice to the Contractor. Such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying the effective date of the termination, whether the Contract shall be terminated in whole or in part and if applicable the portion of work to be terminated. The Contractor shall immediately stop work in accordance with the Notice of Termination and comply with any other direction as may be specified in the Notice of Termination or as provided subsequently by County. The County shall pay the Contractor for the work completed and accepted by County prior to the effective date of the termination, and such payment shall be Contractor's sole remedy. Under no circumstances will the Contractor be entitled to anticipatory or unearned profits, consequential damages, or other damages of any sort as a result of a termination in whole or in part under this provision. The Contractor shall insert in all subcontracts that the subcontractors shall stop work on the date of and if applicable the portion of work to be terminated in a Notice of Termination, and shall require sub-Contractors to insert the same condition in any lower tier subcontracts.

### **24. Termination -- Orderly**

After receipt of a termination notice from the County of Orange, the Contractor shall submit to the County a termination claim, if applicable. Such claim shall be submitted promptly, but in no event later than sixty (60) days from the effective date of the termination, unless one or more extensions in writing are granted by the County upon written request of the Contractor. Upon termination County agrees to pay the Contractor for all services performed prior to termination which meet the requirements of the Contract, provided, however, that such compensation plus previously paid compensation shall not exceed the total compensation set forth in the Contract. Upon termination or other expiration of this Contract, each party shall promptly return to the other party all papers, materials, and other properties of the other held by each for purposes of execution of the Contract. In addition, each party will assist the other party in orderly termination of this Contract and the transfer of all assets, tangible and intangible, as may be necessary for the orderly, non-disruptive business continuation of each Party.

### **25. Errors and Omissions**

All reports, files and other documents prepared and submitted by Contractor shall be complete and shall be carefully checked by the professional(s) identified by Contractor as Project Manager and key personnel attached hereto, prior to submission to the County. Contractor agrees that County review is discretionary and Contractor shall not assume that the County will discover errors and/or omissions. If the County discovers any errors or omissions prior to approving Contractor's reports, files and other written documents, the reports, files or documents will be returned to Contractor for correction. Should the County or others discover errors or omissions in the reports, files or other written documents submitted by Contractor after County approval thereof, County approval of Contractor's reports, files or documents shall not be used as a defense by Contractor in any action between the County and Contractor, and the reports, files or documents will be returned to Contractor for

correction.

## **26. Health and Safety Plan (Attachment 1)**

The Contractor shall ensure compliance with all safety and hourly requirements for employees in accordance with Federal, State, and County safety and health regulations and minimum wage laws. Contractor shall implement all proper health and safety precautions to protect its employees, County staff, the public, and the work. All vehicles used by the Contractor to support this Contract must meet California Motor Vehicle and Cal-OSHA regulations and all other applicable codes required for use on highways in the State of California.

All Contractor employees shall be required to wear uniforms, badges or other acceptable means of identification, to be furnished by the Contractor while the employees are working in any OC Waste & Recycling facilities.

A Health & Safety Plan (H&SP) must be submitted within seven (7) calendar days of Contract award and be approved by the County Safety Inspector PRIOR to any Contractor staff entering County owned or operated landfills and other facilities. The H&SP shall address the areas of work to be performed in this SOW. Include a cover letter outlining the purpose and overall contents of the H&SP, referencing the project number and description, and submit to the Site Project Manager.

The contents of each H&SP must meet all regulatory requirements for the specific work that will be conducted at the site. However, the following is a checklist of the minimal elements for a H&SP. Those plan elements which do not apply to the specific Contract, should be noted (such as "this operation does not involve any confined space work", as a note after Item h).

One or more of the following may be required to be included in a Contractor's H&SP:

- a. Site Background and SOW - Site specific with an emphasis on the type(s) of service performed, the hazards associated with such work and the programs in effect to protect the employee against those recognized hazards.
- b. Injury and Illness Prevention Program (C.C.R. Title 8, S 3203) - Required of all employers of ten or more employees.
- c. Code of Safe Practices (C.C.R. Title 8, S 1509) - All employers are required to have a Code of Safe Practices in writing and posted at the work place.
- d. Emergency Medical Services (C.C.R. Title 8, S 1512) - All employers are required to have this program in writing.
- e. Fire Protection Program (C.C.R. Title 8, S 1920) - All employers are required to have this program in writing.
- f. Hazard Communication Program (C.C.R. Title 8, S 5194) - All employers are required to have this program in writing, if there is potential for their employees to come into contact with any products that may be hazardous.
- g. Requirements for Excavations and Shoring (C.C.R. Title 8, S 1541.1) - All employers are required to have this program in writing, if excavating.
- h. Confined Space Procedures (C.C.R. Title 8, S 5156) - All employers are required to have this program in writing, if confined spaces will be entered.
- i. Hearing Conservation Program (C.C.R. Title 8, S 5097) - This program shall be written into the Health and Safety Plan, if employee noise exposures meet or exceed the levels outlined in C.C.R. Title 8, S 5097.
- j. Personal Protective Equipment (C.C.R. Title 8, S 3380 to S 3400) - Requirements must be included in the Health and Safety Plan, if personal protective equipment is required for the contracted work.
- k. Storage, Handling, and Dispensing of Flammable/Combustible Liquids (Uniform Fire Code Article 79) - Requirements must be included in the Health and Safety Plan, if flammable/combustible liquids will be stored, handled, or dispensed.

- l. Welding, Brazing, and Cutting (C.C.R. Title 8, S 1536 and S1537) - Requirements must be included in the Health and Safety Plan, if performing these actions.
- m. Compressed Gas Cylinders (C.C.R. Title 8, S 1740 to S1743) - Requirements must be included in the Health and Safety Plan, if storing or using compressed gas cylinders.

## **27. County Declared Emergency**

In the event of an emergency or if Orange County is declared a disaster area by the County, state or federal government, this Contract may be subjected to unusual usage. The Contractor shall service the County during such an emergency or declared disaster under the same terms and conditions that apply during non-emergency/disaster conditions. The pricing quoted by the Contractor shall apply to serving the County's needs regardless of the circumstances. If the Contractor is unable to supply the goods/services under the terms of the Contract, then the Contractor shall provide proof of such disruption and a copy of the invoice for the goods/services from the Contractor's supplier(s). Additional profit margin as a result of supplying goods/services during an emergency or a declared disaster shall not be permitted. In the event of an emergency or declared disaster, emergency purchase order numbers will be assigned.

## **28. Notices**

Any and all notices, requests demands and other communications contemplated, called for, permitted, or required to be given hereunder shall be in writing, except through the course of the Parties' project managers' routine exchange of information and cooperation during the terms of the work and services. Any written communications shall be deemed to have been duly given upon actual in-person delivery, if delivery is by direct hand, or upon delivery on the actual day of receipt or no greater than four calendar days after being mailed by US certified or registered mail, return receipt requested, postage prepaid, whichever occurs first. The date of mailing shall count as the first day. All communications shall be addressed to the appropriate party at the address stated herein or such other address as the Parties hereto may designate by written notice from time to time in the manner aforesaid.

### **TO: COUNTY**

OC Waste & Recycling/Procurement  
300 N. Flower Street, Ste. 400  
Santa Ana, CA 92703  
Attn: Procurement Manager  
Phone: 714-834-4000

### **TO: CONTRACTOR**

Tetra Tech BAS, Inc.  
1360 Valley Vista Drive  
Diamond Bar, CA 91765  
Attn: Gus Andraos  
909-860-7777

### **Copy:**

OC Waste & Recycling  
Frank R. Bowerman Landfill  
11002 Bee Canyon Access Rd.  
Irvine, CA 92602  
Attn: Project Manager

IN WITNESS WHEREOF, the Parties have executed this Contract MA-299-18011418 on the dates opposite their respective signatures.

**Tetra Tech BAS, Inc.\***

_____	_____
Print Name	Title
_____	_____
Signature	Date
_____	_____
Print Name	Title
_____	_____
Signature	Date

\* If the contracting party is a corporation, (2) two signatures are required: one (1) signature by the Chairman of the Board, the President or any Vice President; and one (1) signature by the Secretary, any Assistant Secretary, the Chief Financial Officer or any Assistant Treasurer. The signature of one person alone is sufficient to bind a corporation, as long as he or she holds corporate offices in each of the two categories described above. For County purposes, proof of such dual office holding will be satisfied by having the individual sign the instrument twice, each time indicating his or her office that qualifies under the above described provision. In the alternative, a single corporate signature is acceptable when accompanied by a corporate resolution demonstrating the legal authority of the signee to bind the corporation.

.....  
**County of Orange, a political subdivision of the State of California**

_____	_____
Print Name	Title
_____	_____
Signature	Date

APPROVED AS TO FORM:

County Counsel

By \_\_\_\_\_  
Paul Albarian, Senior Deputy

## Attachment 1

### Health & Safety Plan Requirements

As of 1991, the Department of Occupational Safety and Health (DOSH) - commonly referred to as Cal/OSHA - requires a written and effective ***Injury and Illness Prevention Program*** (IIPP). This is mandated in T8 CCR §3203, *General Industry* Safety Orders, and T8 CCR §1509, *Construction* Safety Orders. The IIPP is the primary component of a comprehensive Health & Safety Plan (HSP), and one that is closely evaluated by DOSH Compliance Officers. The OC Waste & Recycling Safety Inspector will review the corporate HSP according to these IIPP requirements:

- **Responsibility** - 3203(a)(1): Identify the person(s) with authority and responsibility for implementing the Program. [NOTE: This is overall authority for the program – field and office]
- **Compliance** – 3203(a) (2): Include a system for ensuring that employees comply with safety and healthy work practices. This includes employee recognition, i.e. safety incentives, disciplinary actions, remedial training or other means to ensure compliance.
- **Communication** – 3203(a)(3): Implement a system to communicate safety and health matters to all affected employees, including provisions whereby the employee can inform the employer of worksite hazards without fear of reprisal. This includes safety or “tailgate” meetings, written communications and/or postings, anonymous hazard reporting by employees, labor/management safety and health committees, or other means to ensure communication with employees.
- **Inspections** – 3203(a) (4): Include procedures for identifying and evaluating work place hazards, i.e. unsafe conditions and/or work practices. Also to be included in the inspection process is the addition of a new or previously unrecognized occupational safety and health hazard (substance, process, procedure or equipment).
- **Accident Investigations** – 3203(a) (5): The Program must include a procedure(s) to investigate injury or occupational illness.
- **Hazard Correction** – 3203(a) (6): Include methods and/or procedures for correcting unsafe and unhealthy work conditions, or practices, in a timely manner.
- **Safety Training & Instruction** – 3203(a)(7): Provide safety training and relevant instruction to employees:
  - New hires, re-classified employees and supervisors.
  - Upon discovery of new or previously unrecognized hazards, or introduction of new materials, policy or equipment.
- **Record Keeping & Documentation:** Records taken to implement and maintain the Program shall include:
  - Safety Inspections – 3203(b) (1): Inspection records, as required by subsection (a) (4), shall include person(s) conducting inspection, identified hazards and corrective actions taken. Retain records for at least one (1) year.
  - Training - 3203(b) (2): Employee training records, as required by subsection (a) (7), shall include employee name or other identifier, dates, type of training, and instructor(s). Retain records for at least one (1) year.

The IIPP is one of a handful of programs that may be required by DOSH. Depending on your operations, your work as a Contractor may require other written programs such as those defined below. It is your responsibility as a Contractor to maintain compliance with applicable standards beyond the basic IIPP requirements, and to submit for review any programs requested by the Safety Inspector should the need arise. The Safety Inspector can be contacted at (714) 834-4117 for additional guidance.

- Emergency Action Plan - T8 CCR 3220; Fire Prevention Plan - T8 CCR 3221; Hazard Communication Program - T8 CCR 5194; Confined Space Entry - T8 CCR 5156-5159; Respiratory Protection - T8 CCR 5144; Lockout/Tagout - T8 CCR 3314, 6003 & 2320; Chemical Hygiene - T8 CCR 5191 & Article 110; Bloodborne Pathogens - T8 CCR 5193; and Hearing Conservation - T8 CCR 5096 – 5100.

## **ATTACHMENT A SCOPE OF WORK**

### **INTRODUCTION**

Central Region Landfills manages and oversees one active site, the Frank R. Bowerman Landfill (FRB), which opened in March 1990 to serve the non-hazardous solid waste disposal needs of Orange County. The landfill currently receives approximately 7,200 tons of refuse per day. FRB is located at 11002 Bee Canyon Access Road, Irvine, CA 92602. In addition it also manages and oversees four closed landfill sites. The closed sites are Santiago Canyon Landfill, Gothard Street Landfill, Cannery Street Landfill and Newport Avenue Landfill (Newport Avenue Landfill does not require landfill gas services).

The South Coast Air Quality Management District (SCAQMD) Rule 1150.1 stipulates that all landfills which accepted waste on or after January 1, 1982, must install and operate a landfill gas extraction system (LFGES) to control landfill gas surface emissions and subsurface migrations. In addition, periodic testing must be performed to evaluate the effectiveness of the LFG control system and to verify that the landfill is in compliance with Rule 1150.1 surface emission limits. SCAQMD Rule 431.1 requires the monitoring of sulfur compounds in gaseous fuels combusted during industrial activities. An alternative Rule 431.1 monitoring plan has been approved by the SCAQMD for the site.

Additionally, due to the explosive nature of methane, the California Code of Regulations, Title 27, Chapter 3, Subchapter 4, Articles 6 (27CCR) contains requirements that owners and operators of landfills, must control LFG (methane) and prevent it from accumulating in enclosed structures and/or migrating offsite.

Normal operating hours at FRB Landfill are Monday through Saturday, 7:00 a.m. to 5:00 p.m. Contractor may gain access to the site prior to or after the operating hours by coordinating with the FRB Site Supervisor or his designee.

Santiago Canyon Landfill is located Santiago Canyon Road, approximately 2 miles southeast of the corner of Santiago Canyon Road and Jamboree Road. The address is 3099 Santiago Canyon Road, Orange CA, 92669. Gothard Street Landfill is located in the City of Huntington Beach on the west side of Gothard Street, 1/4 mile south of Talbert Avenue between Goldenwest and Gothard Streets. There is no separate address for this site. Cannery Street Landfill is located in the City of Huntington Beach at the northwest corner of Magnolia Avenue and Hamilton Street. There is no U.S mail delivery to any of the sites.

Contractor shall perform the upgrade, retrofit, and repair of the Landfill Gas Extraction System (LFGES) to satisfy and comply with regulatory requirements and to provide optional LFGES services “on as needed” basis to perform SCAQMD Rules 1150.1 monitoring, assessments, perimeter probe monitoring and reporting as requested, at the Frank R. Bowerman Landfill (Figure 1A), Santiago Canyon Landfill, (Figure 1B), and Gothard Street Landfill (Figure 1C), and Cannery Street Landfill (Figure 1D).

The OC Waste & Recycling has signed agreements with private developers to build facilities at Frank R. Bowerman Landfill to utilize landfill gas at their own cost. In these cases, the private developer will perform operation, maintenance and monitoring of the LFG recovery systems at the Frank R. Bowerman Landfill.

### **PROJECT DESCRIPTION**

The Contractor shall perform the following tasks:

1. Provide routine services for operation, maintenance and monitoring of the landfill gas extraction system (LFGES) at the Santiago Canyon and Gothard Street Landfills;

2. Provide non-routine services for operation, maintenance and monitoring of the landfill gas extraction system (LFGES) at Frank R. Bowerman, Santiago Canyon, Gothard Street, and Cannery Street Landfills; and
3. Routinely perform SCAQMD-required Rules 1150.1 monitoring at Frank R. Bowerman, Santiago Canyon, Gothard Street, and Cannery Street Landfills.

Work shall include all fieldwork necessary to continue performing operations, maintenance and monitoring services (OM&M) of the LFGES as stated in this scope of work.

The Contractor shall be familiar with the SCAQMD, Subpart WWW of 40 Code of Federal Regulations (CFR) 60, and 27 Code of California Regulations rules and regulations (CCR) as they relate to landfill gas control. Additionally, Contractor must become intimately familiar with the existing Landfill Gas Extraction System (LFGES) components at each of the landfills under Central Regions responsibility, and must work well with the County and regulators to minimize conflicts.

The following documents are available for reference at the Frank R. Bowerman Landfill Operations Office:

- Permits to Construct/Operate a LFG Flare Station/Blower Facility, Condensate Collection and Storage System, and Collection Wells and Associated Piping
- SCAQMD Rule 1150.1 Compliance Plans for Frank R. Bowerman, Santiago, Gothard Street and Cannery Street Landfills

## **CONTRACTOR REQUIREMENT**

1. Contractor shall furnish all management, labor, supplies, materials, tools, equipment and transportation required to perform the work as described in this Scope of Work (SOW), including the provision of LFG collection systems and the monitoring and sampling as specified in the latest SCAQMD Rule 1150.1 Compliance Plan. Utilities, sanitary units, permits, and working drawings shall be provided as mutually determined by County and Contractor Project Managers.

All of said work to be performed and materials to be furnished shall be in strict accordance with typical drawing and specifications (Figures 2A thru 2C), Monitoring Grid for Rule 1150.1 Compliance Plans (Figures 2D-2F) or as specified by Site PM. Contractor shall visit the site, verify measurements, become acquainted with all existing conditions, in order to ascertain the best means of executing the work. The Contractor shall be responsible for taking all steps reasonably necessary to determine the nature and location of the work to be performed under this Contract and to know the general conditions which can affect the work or the cost thereof. Any failure by the Contractor to do so will not relieve Contractor from responsibility for successfully performing the work without additional cost to the County. The County assumes no responsibility for any understanding or representations concerning the nature, location(s) or general conditions made by any of its officers or agents prior to the execution of this Contract, unless such understanding or representations by the County are expressly stated in the Contract.

Contractor shall carefully study and compare all drawings, specifications, and other instructions and shall at once report to Site PM any error, inconsistency, or omission that Contractor may discover.

2. Contractor and Contractor's Project Manager must have at least five (5) years of experience in SCAQMD Rule 1150.1 monitoring and sampling and shall have a minimum of five (5) years' experience in the installation of all aspects of LFG collection systems.

The Contractor shall appoint a Project Manager to direct the efforts in fulfilling the Contractor's obligations under this Contract. This Project Manager shall be subject to the approval of the County and shall not be changed without the written consent of the Site PM.

The Site PM shall have the right to require the removal and replacement of the Contractor's Project Manager. The Site PM shall notify the Contractor in writing of such action. The Contractor shall accomplish the removal within seven (7) calendar days after written notice by the Site PM. The Site PM shall review and approve the appointment of the replacement Contractor's Project Manager. Said approval shall not be unreasonably withheld.

The Site PM will act as liaison between the County and the Contractor during the term of this Contract; said Site PM shall coordinate the activities of the County's administration of this Contract with the Contractor. Any unsatisfactory service shall be reported by the Site PM, in writing, to Attention: Deputy Purchasing Agent, OC Waste & Recycling/Purchasing.

The Contractor's Project Manager (PM) shall be assigned to this project for the duration of this Contract and shall diligently pursue all work and services to meet the project completion times. The Contractor's PM's tasks shall include overall project administration services such as project scheduling, tracking, budgeting, invoicing, and meetings.

The Contractor may from time to time, employ, retain, or engage services of others, as the Contractor deems necessary, in order to properly perform the duties and obligations required of the Contractor under this Contract at the Contractor's cost. The County maintains the right to approve the replacement of an individual.

All communications to be provided by the Contractor to the County and all requests from the County to the Contractor pursuant to the terms and conditions of this Contract shall be communicated in writing by and between the Contractor's PM and the Site PM, unless otherwise specified herein.

3. Contractor and its employees (including Subcontractors) shall check in and check out with the site operations receptionist, a daily maintenance or construction log shall be developed to record project description, work performed, labor requirements, materials, and equipment used, and any other pertinent information. Contractor and its employees (including Subcontractors) shall possess proper identification at all times. Contractor shall meet with the Site PM or its designee before proceeding.

Contractor shall bring to the attention of Site PM or its designee any potential problems discovered during course of work and offer suggestions or solutions before checking out.

4. Contractor shall take all reasonable precautions, as directed by the County, or in the absence of such direction, in accordance with sound industrial practices, to safeguard and protect County property. Damages to County property caused by Contractor's negligence shall be repaired at no cost (both labor and material) to the County.
5. Contractor shall deliver the project complete in all parts and shall be solely responsible for completion of all work in a manner satisfactory to the County. Should any damage occur to adjoining property or landscaping, Contractor shall repair it carefully to its original condition to the satisfaction of adjoining property owner or administrator.
6. Contractor shall keep the work areas clean and free from any debris at the completion of each work day. All debris generated at Central Region sites shall be disposed of at the Frank R. Bowerman Landfill by the Contractor in accordance with all applicable codes, ordinances, and laws pertaining to the disposal of the material.
7. Meetings held between County staff and Contractor's staff to discuss Contractor's non-performance or lack thereof shall not be billable to the County. Meetings with the Contractor PM requested by the County for project-related matters may be billed to the County on a time and materials basis. Other than the Contractor PM, all other Contractor attendees shall be limited to key personnel directly related to



the project and approved by the Site PM prior to the scheduled meetings may be billed to the County on a time and material basis.

The County shall not be responsible for Contractor's drinking water, telephone, fax, and toilet needs while its workers are on site premises.

8. Contractor shall have Class A License. Contractor shall, at all times during the term of this Contract, maintain in full force and effect such licenses as may be required by the State of California or any other governmental entity for Contractor to perform the duties specified herein and provide the services required pursuant to this Contract.
9. Contractor shall maintain on the site, during project work, a competent English-speaking foreman or senior/lead technician and any necessary assistants, all satisfactory to Site PM. The proposed foreman, senior technician and technician shall have a minimum of five (5) years' experience in the monitoring and maintenance of landfill gas collection systems and must have at least five (5) years of experience in SCAQMD Rule 1150.1 monitoring and sampling. The foreman or senior/lead technician shall not be changed except with the consent of Site PM, unless the foreman or senior/lead technician proves to be unsatisfactory to Contractor and ceases to be in Contractor's employ, in which case the foreman or senior/lead technician shall be replaced within 24 hours by a foreman or senior/lead technician with equal qualifications and acceptable to Site PM.

A Contractor PM, foreman, or senior/lead technician (depending on the nature of the work) shall be on site at all times when work is being performed. At no time will an apprentice, helper/laborer, technician, or sub-journeyman be permitted to work without supervision.

10. Proposed personnel to be assigned to perform the services in accordance with this Contract must have at least three years of experience. Contractor shall provide complete resumes of each person to be assigned to the project and designated role of each person. Experience using gas monitoring equipment and the type of equipment shall also be included. **Contractor and personnel assigned to the job site must have the "40-hour training" as required by OSHA 29 CFR 1910.120 and must be well equipped and trained to face a hazardous situation.**
11. Contractor shall facilitate the upgrade, retrofit, extensions, or repair of the LFG extraction and monitoring systems and perform optional services within regulatory guidelines, while maintaining the composition of the LFG at a level which supports continuous operation of the system, where present, and meets the County and regulatory agencies' requirements. The Contractor must also minimize the possibility of subsurface fires at the sites while achieving continued compliance with the SCAQMD Rule 1150.1, Articles 5 and 6 of Subchapter 4 of Chapter 3 of 27 CCR, subpart WWW of 40 CFR 60, and site operating permits. (Reference Attachment 1-A, Regulatory Compliance Requirements.)
12. Contractor must have the ability to respond to any emergency situation within the response requirements for the emergency visits portion of the Scope of Work.
13. The Contractor shall provide at least one full-time (40 hours per week) field technician to perform routine OM&M at Santiago Canyon, Gothard Street and Cannery Street landfills. The technician shall be responsible for routine work as required by the County, if additional technicians are required to complete non-routine work the Contractor shall prepare a task order and submit it to the County for approval prior to start of work.

Note that the following safety gear is **required** to be worn on all sites: steel-toe boots, hardhat and safety vest.

**PROJECT SCOPE OF WORK**

TIME IS OF THE ESSENCE TO THIS CONTRACT. THE CONTRACTOR MUST BE ABLE TO START WORK WITHIN TEN (10) CALENDAR DAYS OF AUTHORIZATION. THE CONTRACTOR SHALL COMPLETE THE WORK NO LATER THAN THE TIME SPECIFIED IN EACH TASK ORDER FOLLOWING THE ISSUANCE OF THE NOTICE TO PROCEED (NTP).

**LANDFILL GAS EXTRACTION SYSTEMS (LFGECS) SCOPE OF WORK**

- I. The scope of work for routine OM&M of the LFGES
- II. The scope of work for SCAQMD Rule 1150.1 monitoring, reporting and laboratory analysis (all landfills except Newport avenue)
- III. The scope of work for non-routine OM&M of the LFGES (all landfills except Newport avenue)

**GENERAL SCOPE OF WORK**

- IV. Coordination with landfill operators' field staff
- V. Site specific health and safety plan
- VI. Spare parts and inventory
- VII. Special services, tools, and equipment
- VIII. Landfill Gas Database and Manager

**LANDFILL GAS EXTRACTION SYSTEMS SCOPE OF WORK****I. ROUTINE OM&M SCOPE**

The work must be structured to facilitate operation of the systems within regulatory guidelines, while maintaining the composition of the LFG at a level which supports continuous operation of the flares, where present, and meets the County requirements. The work must also be designed to minimize the possibility of subsurface fires at the sites while achieving continued compliance with the SCAQMD Rule 1150.1, Articles 5 and 6 of Subchapter 4 of Chapter 3 of 27 CCR, subpart WWW of 40 CFR 60, and site operating permits.

Monitoring frequencies stated below are minimum requirements; more frequent monitoring may be required based on the results of data evaluation. Should additional monitoring be required due to data evaluation, these services will be conducted under the non-routine portion of the project, with prior approval of County's PM. Routine OM&M will be accomplished by performing the following:

**1. Monitoring****Weekly (Santiago Canyon Only)**

The Santiago Canyon LFGECS flare/blower station shall be monitored on a once per week basis. The data obtained shall be evaluated, and any modifications, adjustments, or recommendations shall be implemented during each successive site visit, or immediately, should it be warranted. Monitoring data for the following shall be recorded on a weekly basis:

- Date, time, and signature of monitoring technician;
- Monitoring instrument ID and daily calibration log for the instrument;

- LFGES operating hours/day (i.e. 24hr/day, or 7am-1 pm, etc.);
- Meteorological conditions (e.g., barometric pressure, ambient temperature, etc.);
- LFGES flare station inlet header static pressure;
- Knockout Vessel inlet and outlet static pressures and calculated pressure drop across the demister pad;
- Operating Air compressor(s), Blower(s) and Flare(s) ID;
- Extraction blower(s) operating (inlet and outlet) temperatures and static pressures;
- Pressure drop across the operating extraction blower(s);
- Operating flare(s) inlet LFG concentrations of methane, oxygen, carbon dioxide and carbon monoxide; LFG temperature, pitot tube measurement, static pressure, and inside diameter of pipe where these measurements were taken (for back—up flow rate calculations);
- Flame arrestor inlet and outlet static pressures and calculated pressure drop across the flame arrestors of the operating flare(s);
- Compliance thermocouple selected location (i.e. top, middle, bottom, etc.);
- Operating flare(s) operating temperature and operating temperature set points;
- Operating flare(s) high and low temperature shutdown set points;
- Operating Flare(s) LFG flow rate (utilizing the permanently installed flow meter);
- Condensate injection flow rate; and
- Approximate amount of condensate in the flare station condensate holding tank.

This data shall be recorded on a monitoring form tailored specifically for the site (an example will be provided by the County).

### **Monthly (Santiago Canyon, and Gothard Street)**

LFG extraction wells shall be monitored once per month at the Santiago Canyon and Gothard Street Landfills. The following data shall be collected and recorded:

- LFG temperature;
- Wellhead static pressure;
- Header static pressure;
- Methane gas concentration;
- Oxygen gas concentration;
- Carbon dioxide gas concentration;
- LFG flow rate for each well.
- Sample ports located at strategic points in the gas conveyance header system shall be tested for the same parameters listed above; and
- All data shall be transferred to and stored in a computer database, and analyzed for long term trends (i.e., pressure drops indicating blockage, subsurface combustion, reduced flow rates indicating possible decrease in LFG generation, etc.).

After each monitoring event is completed and the data is evaluated, well flow-rate or vacuum adjustments for each well shall be implemented. Adjustments shall consist of varying the well's individual flow control valve as needed. After each adjustment is performed, the system shall be allowed to reach equilibrium before any additional adjustments are made. Follow-up monitoring shall be conducted and extraction wells shall be adjusted

in response to system balancing on an as needed basis. The goal is to control off-site migration and surface emissions. Should these re-monitoring events become excessive, due to unforeseen conditions (such as: changes in the regulations, changes in the normal operations of the LFG extraction system, etc.), these services will be performed under the non-routine portion of the project.

## **2. Operation**

### **Weekly (Santiago Canyon Only)**

LFG condensate flare injection rates shall be adjusted, as required, to combust collected condensate where possible. Maximum condensate injection rates will comply with applicable Permit to Operate conditions.

### **Monthly (Santiago Canyon, and Gothard Street)**

All headers shall be inspected for proper grading and alignment. Headers shall be re-graded to acceptable gradient.

## **3. Maintenance (Santiago Canyon Only)**

Regular maintenance of all LFGECS equipment is an integral part of this routine OM&M program. General maintenance schedules for each LFGECS may be reviewed at FRB Landfill by contacting the site engineer. Please note that this schedule is not comprehensive and that the Contractor will need to understand and implement all equipment manufacturers recommended regular periodic maintenance tasks. The County reserves the right to add or delete tasks to the maintenance schedules as equipment is added or deleted, or at The County's discretion.

- Each Contract year, the Contractor shall provide the County with a list of required and needed spare parts for each of the sites.
- The Contractor shall service air compressors located at the Santiago Canyon Landfill per the manufacturer's recommendations (Oil changes, filter replacements and any other service required). The labor portion will be performed under the routine and the material and parts will be provided under the non-routine portion of the project). If, in the course of performing routine OM&M activities, the Contractor finds equipment or portions of the LFGECS in need of repairs that fall outside the scope of the routine OM&M portion of the Contract, the Contractor shall prepare non-routine task orders describing the necessary repairs and the estimated cost to perform them. The cost to complete the work shall be paid under the non-routine OM&M portion of the Contract.
- The Contractor shall perform work associated with preparing the flares (1-3) in preparation of the annual source test. Task include but are not limited to: calibration of flow meter, inspection and the cleaning of the flame arrestor, burner manifold, combustion chamber, and burner tiles. If additional work is needed to prepare the flares for the annual source test that falls outside the scope of the routine OM&M portion of the Contract, the Contractor shall prepare non-routine task orders describing the necessary repairs and the estimated cost to perform them. The cost to complete the work shall be paid under the non-routine OM&M portion of the Contract.

#### 4. Reporting

Once each month, a report shall be submitted to the County PM containing the data collected and a summary of all activities performed (including non-routine activities) on the project during the one month reporting period. Field monitoring data, well adjustments performed, shall be included with the monthly reports addressing the previous month's condensate activities. Field monitoring data shall be presented in digital format in an Excel spreadsheet to facilitate further data review and compilation. The monthly report shall include the following topics:

- General overall condensate management system status;
- Any problems or potential problems found;
- Remedial action performed to mitigate problem;
- If problem was fixed, description of how it was fixed; and
- A spare parts inventory list.

A general assessment of the overall performance of the LFGES shall be summarized in the monthly report to review collection efficiency, risk of elevated surface temperatures, and general well-tuning strategy. Recommendations regarding additional maintenance, repairs and/or system modifications shall also be provided for The County's evaluation.

Two hard copies shall be submitted to the County by the 15<sup>th</sup> of the following month. Cost for this item shall be included in the Routine OM&M cost for each landfill. The County reserves the right to change the report format and deliverables. No additional cost will be billed to the County for any format changes.

Probe readings shall be given to the County within twenty-four (24) hours after probe readings are completed for the month for that site. Draft gas well readings shall be sent to the County, in Excel format, within five (5) working days after the readings are completed for the month. Any problems or potential problems found shall be brought to County's attention within 24 hours of discovery of said problem with a verbal or written notice of receipt acknowledged by a County staff, unless Federal, State, or local regulations require a faster notification.

The Contractor shall prepare a report summarizing recommendations regarding additional maintenance, repairs and/or system modifications, and general well tuning strategy.

#### 5. Meetings

Once per month, or as required, the Contractor's key staff members shall formally meet with County personnel at the site to discuss the status of projects. The Contractor shall be present at coordination meetings with the County's landfill gas-to-energy partner as requested by the County. Good communication between the Contractor, the regulators, the County and its partners is critical to the success of this project. Cost for this item shall be included in the Routine OM&M cost for each landfill.

## II. SCAQMD RULE 1150.1 MONITORING AND REPORTING SCOPE OF WORK

All work under the 1150.1 monitoring program will be performed in accordance with the SCAQMD *Guidelines for Implementation of Rule 1150.1 (Guidelines)* and site specific *Compliance Plans* prepared for the Frank R. Bowerman, Santiago Canyon, Gothard Street, and Cannery Street Landfills. The Contractor will provide all equipment necessary for the completion of these tasks except the laboratory analyses for the routine portion of the 1150.1 program, which will be provided by the County. In compliance with each site's Rule 1150.1 compliance plan, the Contractor shall perform the following tasks for the duration of this Contract:

## 1. Instantaneous Surface Monitoring

Instantaneous surface monitoring, including field procedures and equipment, shall be conducted in accordance with the approved *Compliance Plan* for each landfill.

The entire surface of the disposal area of each landfill has been divided into monitoring grids. Each grid measures approximately 50,000 square feet in area. The monitoring grids shall be used for both instantaneous and integrated surface monitoring/sampling.

Instantaneous measurements of TOC concentrations immediately above the surface of the grids shall be obtained using a portable flame ionization detector (FID), which meets *Guideline* specifications. The probe of the FID must be held within 3 inches of the landfill surface while traversing the monitoring grids. A surface inspection shall also be performed during instantaneous surface monitoring to identify cracks or fissures in the landfill cover that could be potential pathways for LFG to escape to the atmosphere. Surface areas of the landfill at which TOC concentrations exceed 500 ppmv shall be marked with yellow flags and surface areas at which TOC concentrations exceed 200 ppmv shall be marked with blue flags to identify the areas in need of remediation. As an option, County may require Contractor to survey these locations to an accuracy of two feet in horizontal distance.

To initiate remediation, the Contractor shall notify the Site Engineer of the landfill and the County PM of exceedance areas within 24 hours of identification.

## 2. Integrated Surface Sampling

Integrated surface sampling, including field procedures and equipment, shall be conducted in accordance with the *Guidelines* and the approved *Compliance Plan* for each landfill.

One integrated surface sample will be collected from each of the established sampling grids during each sampling event. Each integrated surface sample must be collected over a continuous 25-minute period while a field technician walks a prescribed path over the sampling grid. The samples shall be collected in 10-liter Tedlar bags using a non-contaminating pump. The probe of the sampling pump shall be held at a distance of not more than 3 inches above the surface of the landfill during sample collection. The Tedlar bags shall be enclosed within lightproof cardboard boxes to reduce the potential for photo-degradation of air contaminants targeted for analysis. Any samples containing greater than 25 ppmv TOC shall be recorded as an exceedance and the grid shall be identified as an area in need of remediation.

To initiate remediation, the Contractor shall notify the Site Engineer of the landfill and the County PM of exceedance areas within 24 hours of identification.

The Contractor shall coordinate with the County PM (or his designee) to enact remediation measures. At the Santiago Canyon Landfill the Contractor shall be responsible for remediation measures related to the operation of the LFGES, including, but not limited to, adjustment of extraction wells in the general vicinity. The County shall provide additional compacted cover material to specific exceedance areas when necessary.

Following implementation of mitigation measures, and within 10 days of the initial exceedance, the Contractor shall re-monitor all exceedance areas; and, within 24 hours, notify the County PM of continued non-compliance. Two attempts at remediation and re-monitoring shall be performed under the non-routine portion of this project. In accordance with the *Guidelines*, if an exceedance still exists after two remediation attempts, the Contractor shall make recommendations of LFGES modifications, to the County, to bring the landfill into compliance with the applicable regulatory requirements.

As a means of tracking remediation of exceedance areas, Integrated Surface Monitoring (ISM) Data Sheets shall be filled out and distributed to appropriate personnel. ISM data sheet format shall conform to the specifications

of the County. Contractor shall notify the PM in writing of any outstanding exceedances within twenty-four (24) hours of noting such exceedances.

During each sampling event, a minimum of two samples or 10% of all exceedances, whichever is greater, per event shall be collected and delivered to an approved analytical laboratory, and analyzed within 72 hours of sampling for the following compounds:

- Fixed gases (i.e., methane, carbon dioxide, oxygen, and nitrogen)
- Total gaseous non-methane organic compounds (TGNMO)
- Core Group Toxic Air Contaminants (TAC) (listed in Table 1 listed in Table 1 of the SCAQMD Rule 1150.1)

Samples must be collected only when meteorological conditions meet the requirements for wind speed and precipitation found in the *Guidelines*. Sampling must be conducted on days when there had been no rain during the preceding 72 hours. Sampling shall be discontinued if instantaneous wind speeds are greater than 10 miles per hour (mph), or if the average wind speed over a 15-minute period exceeds 5 mph.

### 3. Ambient Air Sampling

Ambient air sampling, including field procedures and equipment, shall be conducted in accordance with *Guidelines* and the approved *Compliance Plan* for each landfill.

Ambient air samplers must be positioned at the perimeter of the landfill to collect air samples representative of upwind (i.e., background) and downwind (i.e., air that has passed over the landfill surface) conditions at the site. Positioning of ambient air sampler locations must be based on evaluation of historic wind monitoring data collected at each landfill. Sampler locations shall be established to provide good meteorological exposure to the predominant offshore and onshore wind flows. Ambient air samplers shall be constructed, installed, and operated to meet SCAQMD design criteria and performance specifications found in the *Guidelines*. Light-sealed boxes containing individual 10-liter Tedlar sample bags must be housed within each weather-tight, ambient air sampler.

Ambient air sampling shall be conducted over two simultaneous 12-hour periods. One sample must be collected for each 12-hour period from each upwind and downwind sampler and shall be forwarded to the laboratory for analyses.

Collected samples shall be delivered to an approved analytical laboratory and analyzed within 72 hours of sampling for the following compounds:

- Fixed gases (i.e., methane, carbon dioxide, oxygen, and nitrogen)
- Total gaseous non methane organic (TGNMO)
- Total Reduced Sulfur Compounds (TRS)
- Core Group Toxic Air Contaminant (TAC)

Ambient air sampling must be conducted when weather conditions conform to the meteorological criteria specified in the *Guidelines*. These include:

- No rainfall during the sampling period
- Average wind speeds not exceeding 15 mph during any 30-minute period
- Instantaneous wind speeds not exceeding 25 mph

Wind speed and direction monitoring system with a continuous recorder, at a location on the landfill property that is representative of the wind speed and direction of the areas sampled, shall be installed.

#### 4. LFG sampling and analysis

LFG sampling, including field procedures and equipment, shall be conducted in accordance with the *Guidelines* and the approved *Compliance Plan* for each landfill.

LFG samples shall be collected from the main LFG header line entering the blower/flare station. At each of the sites, a LFG sample must be collected in a 10-liter Tedlar bag (enclosed in a light-sealed box) over a 10-minute period.

These samples shall be delivered to an approved analytical laboratory and analyzed within 72 hours of sampling for the following compounds:

- Fixed gases (i.e., methane, carbon dioxide, oxygen, and nitrogen)
- Total gaseous non methane organic (TGNMO)
- Total Reduced Sulfur Compounds (TRS)
- Core Group Toxic Air Contaminant (TAC)

#### 5. Perimeter Probe Monitoring and Sampling

Perimeter probe sampling, including field procedures and equipment, shall be conducted in accordance with the *Guidelines* and the approved *Compliance Plan* for each landfill (Except Newport Avenue).

All refuse boundary gas probes shall be monitored for TOC as measured using a portable FID or alternative SCAQMD approved instrument. Prior to collecting a sample, each probe must be evacuated until the TOC concentration remains constant for a minimum of 30 seconds, as indicated by the FID. Each perimeter probe sample shall be collected in a 10-liter Tedlar bag housed within a light-sealed box over a continuous 10-minute period utilizing a non-contaminating pump. The sample will then be analyzed using the portable FID.

If the TOC concentration, as measured by the FID, is below 5% by volume as methane in all probes, then once a quarter collect a single Tedlar bag sample from the probe containing the highest methane concentration and submit to an approved analytical laboratory for analysis within 72 hours of sampling for the following compounds:

- Fixed gases (i.e., methane, carbon dioxide, oxygen, and nitrogen)
- Total gaseous non methane organic (TGNMO)
- Core Group Toxic Air Contaminant (TAC)

If one or more probes contain TOC at a concentration greater than 5% by volume as methane, then collect Tedlar bag samples from each of the probes having a TOC concentration greater than 5% by volume as methane, up to a maximum of five probe samples collected. If more than five probes contain TOC at a concentration greater than 5% by volume as methane, then collect Tedlar bag samples from the five probes having the highest TOC concentration. Collected samples shall be delivered to an approved analytical laboratory and analyzed within 72 hours of sampling for the following compounds:

- Fixed gases (i.e., methane, carbon dioxide, oxygen, and nitrogen)
- Total gaseous non methane organic (TGNMO)
- Core Group Toxic Air Contaminant (TAC)

In addition, each monitored probe containing greater than 2% methane shall require ISM monitoring on the area between the probe and refuse footprint. This task must be performed at the same interval as probe monitoring under a non-routine Task Order. If any probe reading is found to be above 0.0%, or if any problems with the probes (such



as damage) are found, then the County shall be notified in person or by telephone immediately. Messages left via voice mail, e-mail, or other means which do not involve live interaction with a County representative do not meet this requirement.

Probe readings shall be given to the County within twenty-four (24) hours after probe readings are completed for the month for that site. Any problems or potential problems found shall be brought to County's attention within 24 hours of discovery of said problem with a verbal or written notice of receipt acknowledged by a County staff, unless Federal, State, or local regulations require a faster notification.

## **6. Quarterly Reporting**

Rule 1150.1 Quarterly Monitoring Reports will be prepared by The County.

## **7. Annual Source Testing and Reporting (Santiago Canyon Landfill Only)**

The Contractor shall assist The County in writing specifications for the annual emissions tests required by SCAQMD. The County will arrange for a different vendor to perform source testing. The Contractor shall review and comment on the test protocols submitted by the source test vendor and obtain approval from the SCAQMD on behalf of the County. On behalf of the County, the Contractor shall manage and monitor the source test, check the test results, submit test results to The County for submittal to the SCAQMD, and answer any questions from the SCAQMD. All the work performed shall be compensated on a time and materials basis according to the labor rate sheet provided by the Contractor for all personnel assigned to this project. The Contractor shall be responsible for ensuring that the testing is in accordance with the required protocol of SCAQMD and the systems are ready for the source testing. If the source tests have to be repeated because of lack of maintenance of the systems, the Contractor will conduct a second source test at its own expense. Any work for this task will be performed under a non-routine Task Order.

Flare stack emissions source testing shall be performed on an annual basis at the Santiago Canyon Landfill. One flare stack shall be source tested during June/July of each calendar year.

Source testing shall comply with the landfill's specific flare station or blower facility permit to operate. The Contractor shall prepare source testing protocols in accordance with previously established and SCAQMD approved methodologies. Contractor will tune each flare to its optimum operating condition prior to performing official source tests. After the laboratory results are obtained, and within 45 days of completion of on-site sampling, the Contractor shall prepare and submit a draft source test report to the County for review. The report will include all pertinent and necessary data to meet SCAQMD approval, including, but not limited to, an executive summary, a separate discussion of each test performed, summary tables of field measurements and laboratory analytical results, instrument calibration logs, and description of sampling points. The Contractor is responsible for making every effort to meet emission compliance limits. The County will not provide additional funding for required re-testing.

## **8. Compliance Review of LFG Data (Frank R. Bowerman Landfill)**

The Contractor shall review LFG monitoring data (compiled by a third party) for Frank R. Bowerman Landfill and provide a general assessment of the overall performance of the LFGES from a compliance standpoint. The review shall be performed on a quarterly basis or more frequently as requested by the County. The data shall be reviewed for the following:

- Compliance with NSPS regulations, SCAQMD Rule 1150.1, CCR Title 27, and other regulations as appropriate;
- Risk of elevated subsurface temperature events;

- Risk of offsite migration; and
- Optimization of system for power generation.

### **III. NON-ROUTINE MAINTENANCE SCOPE**

#### **1. Non-Routine Scheduled Maintenance**

Non-routine scheduled maintenance consists of corrective repairs or maintenance work identified during the routine OM&M inspections and site visits. The work shall consist of, but is not limited to, items such as repair of broken valves, replacement of torn flex hoses, and repair of damaged conveyance piping and relocation of header due to landfilling operations. This work is essential for proper system operation; however, it is considered the type of work that can be scheduled to allow for procurement of materials, equipment, and scheduling of personnel. Non-routine scheduled maintenance shall be performed only after receipt of, or with the prior written authorization from the PM (or his designee). The following list presents activities expected to be non-routine occurrences:

- Thermocouple replacement (Santiago Canyon Only)
- Blower belt replacement (Santiago Canyon Only)
- UV scanner replacement (Santiago Canyon Only)
- Flare refractory repair or replacement (Santiago Canyon Only)
- Flare coating repair (Santiago Canyon Only)
- Flare burner repair or replacement (Santiago Canyon Only)
- Air compressor equipment repairs (Santiago Canyon Only)
- Well head and appurtenance replacement
- Well extension, capping and abandonment
- Installation of temporary condensate tanks
- Well service removal and re-installation
- Subsurface monitoring probe installation and abandonment
- Header removal and re-installation
- Knockout vessel demister pad cleaning
- Knockout vessel demister pad cleaning (Santiago Canyon LFGECS only); and
- Equipment removal, installation and replacement
- Annual Source Testing (Santiago Canyon LFGECS only)
- Condensate removal and maintenance of condensate components

#### **2. Non-Routine Unscheduled Emergency Services**

Non-routine unscheduled emergency services include events which may require immediate response. This type of event shall include, but not be limited to the following:

- Response to call out by the automatic dialing system;
- Repair of landfill gas and condensate system piping breaks or separations causing the emergency shutdown of the LFGECS;
- Repair or replacement of extraction wells;
- Repair or replacement of probes;
- Odor complaints;
- Flare station shut-down events;

- Correcting surging vacuum;
- Condensate sump repair; and
- Any response required for compliance issues.

The nature of these urgent items is such that a response cannot be scheduled ahead of time. Contractor shall respond to these conditions, on an as-needed basis, 24 hours per day, 7 days per week. The County does not require the Contractor to respond to auto dialer call-outs in the non-daylight hours due to the unsafe nature of the landfills. However, Contractor is expected to respond first thing the following morning. LFG professionals shall be intimately involved in mitigating system malfunctions and directing emergency call-out situations. Emergency events shall be coordinated through the County's site engineer in an effort to expedite necessary corrective measures. Task orders will be generated and presented to the County itemizing the personnel and length of time necessary to complete each task. Non-routine unscheduled emergency service shall be performed only after receipt of written or verbal authorization from the County site engineer (or designee). For emergency call-outs a minimum of 4 hours will be charged to the Task Order.

### **3. Task Orders**

As-needed, non-routine service calls may be placed against this Contract by the PM. Each activity under this Contract will be covered by a Task Order. It is expressly understood that the tasks (service calls) to which the Contractor is asked to respond to, will be on an "as-needed" basis, and authorized by the PM. As each task is identified, the Contractor will prepare a "Task Order Proposal" which details the scope of work to be accomplished, list of deliverables, schedule for completion, start date, completion date, and an estimated not-to-exceed cost for its completion, including a detailed breakdown of all labor and materials costs. Each task proposal will be reviewed and approved by the PM prior to commencement of the proposed work. These services may be paid on a unit price times the number of units basis, time and materials (receipts needed for materials) basis, time and materials not-to-exceed (receipts needed for materials) basis, or lump sum basis, as mutually agreed by PM and Contractor. Notwithstanding any provision to the contrary in this Agreement, in no event will any Task Order amend or modify any provision of this Agreement, including, but not limited to this Scope of Services or compensation provisions. Any such modification is void.

In the event of unforeseen circumstances occurring necessitating a modification to the authorized Lump Sum Task Order, a separate Task Order authorization may be requested by the Contractor to reflect the change of scope of services.

Upon completion of the Task Order, the Contractor shall submit to the PM a billing invoice for services rendered. The Contract Administrator's authorization must be submitted with the invoice in order for payment to be made. The PM shall review and approve the invoice for payment by County Accounting.

The Contractor shall at all time during the term of the Task Order keep full and complete records and documentation in support of the services performed. The County shall have the right to request and examine any project records for the purpose of determining its accuracy in accordance with the terms and conditions of this Contract.

## **GENERAL SCOPE OF WORK**

### **IV. COORDINATION WITH LANDFILL OPERATORS' FIELD STAFF**

Contractor shall coordinate with landfill operator's field staff since the Frank R. Bowerman Landfill will continue to receive refuse. The Contractor shall conduct its operations under its Contract with the County so as to minimize the impact of its contractual performance on landfill operations. Lastly, the Contractor, as provided in Article IV, shall cooperate with all other contractors performing activities at the landfill sites.

**V. SITE SPECIFIC HEALTH AND SAFETY PLAN**

The Contractor shall provide a Health and Safety Plan within seven (7) days of Contract award. The Contractor will not proceed with service until the required insurance and Health and Safety Plan have been received and approved by The County.

**1. Health and Safety Laws and Regulations**

The Contractor shall provide site specific Health and Safety Plan in accordance with the following instructions.

The Contractor shall prepare a Health and Safety Plan (H&SP) in compliance with all local, municipal, state, and federal health and safety laws, orders, and regulations applicable to Contractor's operations in the performance of the Scope of Work hereunder. While on the premises of OC Waste & Recycling, the Contractor and Contractor's employees, subcontractors, and agents shall comply with the requirements of the Occupational Safety and Health Act and any State approved plan, and the regulations there under, to the extent applicable and shall ensure that all Contractor's employees, subcontractors, and agents have a safe place of work on the premises of OC Waste & Recycling.

Any claims by Contractor for adjustments in time and/or cost for delays in the start of work due to Contractor's failure to deliver an H&SP acceptable to the County will not be considered. The Contractor shall be solely and completely responsible for conditions on the job site, including safety of all persons and property during the performance of the work. The County's acceptance of Contractor's H&SP does not, in any way, relieve or transfer any such responsibilities to the County.

**2. Health and Safety Plan Checklist**

The contents of the Health and Safety Plan shall meet all regulatory requirements for the specific work required. However, the following is a checklist for the minimum elements for a Health and Safety Plan. Those plan elements which will not apply to the specific Contract should be noted (such as "this construction does not involve any confined space work," as a note after item H).

One or more of the following may be required to be included in the Contractor's Health and Safety Plan (H&SP):

**Mandatory:**

- A. Site Background and Scope of Work: Site specific with an emphasis on the type(s) of service(s) performed, the hazards associated with such work, and the programs in effect to protect the employee against those recognized hazards.
- B. Injury and Illness Prevention Program (Title 8, California Code of Regulations, section 3203): Required of all employers of 10 or more employees.
- C. Code of Safe Practices (Cal. Code Regulations, Title 8 § 1509): All employers are required to have a Code of Safe Practices in writing and posted at the work place.
- D. Emergency Medical Services (Cal. Code Regulations, Title 8, § 1512): All employers are required to have this program in writing.
- E. Fire Protection Program (Cal. Code Regulations, Title 8, § 1920): All employers are required to have this program in writing.

**Required by Scope of Work:**

- F. Hazard Communication Program (Cal. Code Regs., Title 8, § 5194): All employers are required to have this program in writing if there is a potential for their employees to come in contact with any products that may be hazardous.
- G. Requirements for Excavations and Shoring (Cal. Code Regs., Title 8, § 1541.1): All employers are required to have this program in writing if excavating.

- H. Confined Space Procedures (Cal. Code Regs., Title 8, § 5156): All employers are required to have this program in writing if confined spaces will be entered.
- I. Hearing Conservation Program (Cal. Code Regs., Title 8, § 5097): This program shall be written into the H&SP if employee noise exposures meet or exceed the levels outline in Cal. Code Regs., Title 8 § 5097.
- J. Personal Protective Equipment (Cal. Code Regs., Title 8, §§ 3380-3400): Requirements must be included in the H&SP if personal protective equipment is required for the contracted work. Hard hats, safety goggles, orange vests, and audiometric (hearing) protection are required for work to be performed under this Contract.
- K. Storage, Handling, and Dispensing of Flammable/Combustible Liquids (Uniform Fire Code Article 79): Requirements must be included in the H&SP if flammable/combustible liquids will be stored, handled, or dispensed.
- L. Welding, Brazing, and Cutting (Cal. Code Regs., Title 8, §§ 1536, 1537): Requirements must be included in the H&SP if performing these actions.
- M. Compressed Gas Cylinders) Cal. Code Regs., Title 8, §§ 1740-1743): Requirements must be included in the H&SP if storing or using compressed gas cylinders.

## **VI. SPARE PARTS AND INVENTORY**

1. As requested, Contractor shall prepare and submit a list of required/recommended consumable items and spare parts for the existing gas collectors respectively. With Site PM's approval, Contractor shall purchase required spare parts, supplies, and materials. Contractor shall invoice County in accordance with the terms and conditions provided herein. At the Site PM's approval, Contractor may utilize spare parts stockpiled by the County provided that such spare parts or materials are recorded in the construction daily log as County owned.
2. At the request of the Site PM, Contractor shall keep a running inventory of consumable items and spare parts and submit a report at no cost to County. Contractor shall inform the Site PM if any such items/parts need to be replenished. Contractor shall store the items/parts on site in an area designated by the Site PM. Upon termination of the Contract, the inventory of supplies, materials, and parts shall remain the property of County.

## **VII. SPECIAL SERVICES, TOOLS, AND EQUIPMENT**

1. When directed by the PM, the Contractor shall provide special tools and additional training for Central Region personnel, and perform additional repair of the LFGES, including electrical and mechanical work, with updated as-built drawings, etc. (not covered under Task I). All electrical work shall be performed by licensed electricians and according to National Electric Code (NEC) standards. All routine electrical maintenance services should be included as part of the monthly maintenance fee (Task I). Only specialized electrical services that require a qualified electrical subcontractor will be reimbursed under conditions specified on Task VII.2 below. The Contractor shall submit a cost estimate for all special services, tools, and equipment to the PM for written approval. Such work may be performed on a time-and-materials basis, a time-and-materials not-to-exceed basis, or on a lump sum basis, depending upon the nature of the work and the quote mutually agreed upon. Material and replacement parts purchased for the repair will be reimbursed at Contractor's cost plus the percentage stated in this Master Agreement, and in accordance with the terms and conditions of the Master Agreement. The Contractor shall proceed with the work specified under Task VII.2 only after receiving the PM's written approval.

2. The County will reimburse the Contractor for using subcontractors or specialized services, or renting special equipment that may be required to perform a particular job (not covered under Task I) only if it is pre-approved by the PM. However, material costs and other expenses incurred by the subcontractors will only be reimbursed at actual subcontractors' cost plus the percentage stated in this Master Agreement, and in accordance with the terms and conditions of the Master Agreement. The County will not reimburse the Contractor for an additional mark-up of materials if the subcontractor has already charged a mark-up of their materials above their actual cost. If the anticipated cost of the subcontractor's work or the specialized services should exceed \$1,000, the Contractor shall solicit three separate bids for OC Waste & recycling reference, unless the provision is otherwise waived by the PM. All specialized services may be subject to the approval of the Director of OC Waste & Recycling or the County of Orange Board of Supervisors.

#### **VIII. LANDFILL GAS DATABASE AND MANAGER**

Contractor shall provide to the County access to a Landfill Gas Data Manager of the County's choosing. The Landfill Gas Data Manager will be a web-based system that includes the following functions:

- Secure log in with varying degrees of access based on user credentials
- Remote online access to site specific data
- Easy site snapshot summary dashboard
- Data uploading for GEM 2000 and 5000 data files
- Site specific forms (IPAD) (one form per site of the following: Probes, Wells, Blower/flare station)
- Real time notification of uploaded data with administrator preapproval
- Data viewing in customizable formats
- Ability to save customizable views per user
- Data graphing for customizable date ranges with color coding and X/Y axis range manipulation
- Standard data acquisition
- Gas well monitoring report
- Blower station monitoring report
- Probes monitoring report
- Mapping of monitoring results as satellite images
- Color coding, and date range selection.
- Site set-up into data base
- End user training
- Equipment cost (for IPADs, Computers, etc...)
- Historical data entry
- Creation of custom reports
- Collecting survey points for wells or other components that can be mapped using the mapping feature

#### **IX. CONTRACTOR ASSUMPTIONS AND CONDITIONS**

Contractor makes the following assumptions:

1. Due to the dynamic nature of landfills, Contractor has based the cost estimate associated with this scope of work on the current site conditions as described in the Contract.
2. Contractor does not take responsibility for the overall quality or quantity of the collected landfill gas.

3. Contractor assumes that all surface emissions re-monitoring of the landfill surface will be performed as non-routine services as predicting the potential quantity and frequency of these events is not possible.
4. All required soil and surface maintenance necessary to achieve compliance will be conducted by OCWR or by a non-routine work order by Contractor.
5. The following are assumptions for the non-routine personnel and equipment unit cost rate sheet:
  - a) A valve extension handle is not included in the material cost for any of the above-grade isolation valves. Above-grade valves will have standard gear operators.
  - b) Installed prices for fittings & valves are based upon concurrent installation into a newly constructed lateral or header line. Installation of fittings & valves into existing above or below grade lateral or header lines will be done using included labor & equipment.
  - c) Delivery fees are not included in any materials pricing.
  - d) Scheduling of system shutdowns should be done to coincide with on-site construction crews, so as to not incur additional mobilization/demobilization or standby charges for equipment and staff.
  - e) Locations and depths of all vertical wells and probes are to be chosen and specified by OCWR.
  - f) OCWR will identify and/or clearly mark all underground and overhead improvements in the area of excavation or drilling work to be performed.
  - g) OCWR will provide clean backfill and construction soil as may be needed for construction to within approximately 100 feet of the active work.
  - h) OCWR will create access roads and pads as needed for drill rigs and support equipment for vertical well and probe drilling and installation prior to drilling equipment being mobilized to the project site.
  - i) OCWR will provide all project lay-out, construction staking and as-built survey as-needed. If OCWR requires Contractor to perform these functions, pricing will be negotiated.

## **Attachment 1-A**

### **Regulatory Compliance Requirements (County)**

The Contractor shall not be entitled to any time extensions or compensation for any cost due to any action required as a result of the Contractor's failure to comply with those provisions within the Contractor's control as listed below. The Contractor shall be responsible for ensuring that the Contractor's Subcontractor(s) comply with the provisions of this Attachment. The Contractor shall be liable for any action or inaction resulting in a fine imposed by the regulatory agencies on those incidents of noncompliance that is within the Contractor's area of responsibility.

#### **A. PERMITS**

1. The Contractor shall be responsible for obtaining all trade-related permits required by the Project, permits required for the operation and storage of any equipment or hazardous regulated materials brought onsite, and permits required for dispensing and storing of petroleum-related products.
2. The Contractor shall maintain copies of all permits required for construction of this Project at the job site. Exceptions to this shall be the South Coast Air Quality Management District (SCAQMD) permit for dust control and the SCAQMD permit and Local Enforcement Agency (LEA) approval for refuse excavation, if required, which shall be obtained by the County. However, it is still the responsibility of the Contractor to comply with the conditions in the SCAQMD permits and all other permits, which shall become a part of this Contract. The Contractor shall submit to the County a California Occupational Safety Health Agency (Cal-OSHA) Excavation Permit, if necessary. The Contractor shall obtain a copy of the landfill's National Pollutant Discharge Elimination System (NPDES), Storm Water Pollution Protection Plan (SWPPP) and Monitoring Program (MP) and comply with the conditions therein that are applicable to the Contractor.

#### **B. REGULATORY COMPLIANCE AUTHORITIES**

All work shall be performed in accordance with the most current regulatory criteria and standards, which include, but are not limited to:

- Waste Discharge Requirements issued by the respective California Regional Water Quality Control Boards;
- Resource Conservation and Recovery Act, Subtitle D;
- California Code of Regulations Titles 8 (Cal-OSHA), 14, 23, and 27;
- South Coast Air Quality Management District Rules 403, 431.1, Title V, NSPS and 1150.1;
- National Pollutant Discharge Elimination System (NPDES);
- County of Orange, OC Public Works Department;
- County of Orange, OC Public Works Department Grading Manual and Excavation Code;
- Uniform Fire Code;
- Others may include: APWA Standard Specifications, current County of Orange Hydrology Manual and California Environmental Quality Act, as well as instructions set forth by the Director of OC Waste & Recycling or designee; and
- Any other agency permits pertinent to the Project.

#### **C. ORDINANCES**

Construction shall conform to all Federal, State, County, and local codes, ordinances, regulations, and standards having jurisdiction thereof. In the case of conflict between any such applicable documents mentioned above and the specifications and drawings, the highest requirement shall govern. No additional charges shall be allowed for any changes to make work conform to regulations of above-mentioned documents or governing agencies, but shall be considered as completely included in the Contract price.



**D. CULTURAL/SCIENTIFIC RESOURCES**

1. The County may employ the services of a paleontological/archaeological firm to monitor the excavation at the project site. The Contractor shall cooperate with the personnel of the firm. In the event the paleontologist or archaeologist asks the Contractor to stop work in a particular section of the excavation, the Contractor shall abide by the request immediately.
2. If the Contractor's operations uncover, or Contractor's employees find any burial grounds or remains, ceremonial objects, petroglyphs, and archaeological or paleontological, or other artifacts of like nature within the construction area, the Contractor shall immediately notify the County's onsite representative of the Contractor's findings and shall modify the construction operations, so as not to disturb the findings pending receipt of notification as to determination of the final disposition of such findings from the County.
3. Should the findings, or notification as to disposition of findings, result in delays or extra work, additional time and/or extra work, payment will be allowed as provided for within this Contract.
4. Any findings of a cultural/scientific resource nature shall remain the property of the County and not become the property of the person or persons making the discovery.

**E. DISPOSAL OF SOLID WASTE**

The Contractor shall be responsible for proper disposal of all refuse. Unless the waste meets Class III solid waste criteria, and any other requirements in the landfill's solid waste facilities permit, the Contractor shall not dispose of said waste at the landfill. If the Contractor elects to dispose of Class III refuse in any OC Waste & Recycling operated landfill, the Contractor shall be responsible for processing refuse through the scales and shall pay the current gate fees, unless it is specified otherwise in the Contract.

Solid waste resulting from maintenance and service may be disposed of within the active landfill at no charge if acceptable within the guidelines of a Class III landfill and approved in writing by the County. The Contractor shall contact the Site Project Manager or prior to disposal for the designated disposal area.

Any other solid waste or liquid waste resulting from service and maintenance that is unacceptable for disposal in a Class III landfill (including tires) shall be the sole responsibility of the Contractor and shall be included as part of the Fixed Rate Contract. The Contractor shall arrange for a State approved waste-handling firm to dispose of any material classified as hazardous or unacceptable waste. This firm shall be bonded and found acceptable to County of Orange CEO/Risk Management. The Contractor shall submit proof of this firm being retained by the Contractor within ten (10) calendar days of the effective date of the Contract. Any unacceptable refuse left beyond thirty (30) days may be disposed of by the County and any related costs shall be deducted directly from the monthly invoicing, performance bond, or other method at the option of OC Waste & Recycling, as stated within Section M of this Attachment, Maintenance Facility and Work Area.

**F. DISPOSAL OF LIQUID WASTE**

The County does not permit disposal of liquid waste of any kind in County Landfills. This includes any waste materials, sludge, soils, etc. with moisture content over 50%.

**G. STORM PROTECTION**

1. The Contractor shall take every practicable precaution to minimize danger to persons and to the work during rainy or windy conditions. The County shall protect all County facilities within their work project. Also the Contractor shall protect all facilities from damage due to the Contractor's negligence.
2. When necessary for storm protection, the Contractor shall follow the site storm water pollution prevention plan. (Reference Section H of this Attachment, NPDES Storm Water Discharges.)

**H. NPDES STORM WATER DISCHARGES**

**Work under this Contract shall be subject to the requirements of the NPDES storm water regulations.**

The Contractor shall comply with the NPDES Regulations and the Storm Water Pollution Protection Plan for the landfill at which the work is to be conducted. Construction-related activities, including but not limited to the elements of the SWPPP, shall be performed to eliminate non-storm discharges to the storm water control system, by the Contractor and Subcontractor(s). The Contractor shall submit a Storm Water Management Plan in compliance with NPDES Regulations and site specific SWPPP. OC Waste & Recycling will notify the Contractor of any non-compliance with the foregoing stipulations, and appropriate actions shall be taken promptly. The Contractor shall also notify OC Waste & Recycling of any condition that could lead to noncompliance with the permit requirements. The Contractor shall be responsible for storm water monitoring at the landfill to comply with his proposed storm water plan, if necessary.

The Contractor shall not be entitled to any time extensions or compensation for any cost due to any action required as a result of the Contractor's failure to comply with those provisions of the SWPPP within the Contractor's control. The Contractor shall be responsible for ensuring that the Contractor's Subcontractor(s) comply with the provisions of this Section. The Contractor shall be liable for any action or fine imposed by the regulatory agencies on those incidents of noncompliance that are within the Contractor's area of responsibility.

The Contractor is not required to obtain an NPDES Construction Storm Water Industrial Activity Permit; however, the Contractor must abide by the site's NPDES requirements.

The appropriate SWPPP will be available for Contractor's review in the offices of the Site PM.

**I. DISCOVERED HAZARDOUS WASTE**

1. The Contractor shall promptly, and before the following conditions are disturbed, notify the County in writing of any:
  - a. Material that the Contractor believes may be hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law;
  - b. Subsurface or latent physical conditions at the site differing from those indicated; and

Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract.

2. The County shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve a hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work, the County shall issue a modification under the procedures described in the Contract. If hazardous waste is found, the County will contact its key waste Contractor to properly remove and dispose of the waste. The Contractor shall not disturb the waste. The Contractor shall immediately notify the County if the waste is found leaking, not containerized, or vapors or odors are detected.
3. In the event that a dispute arises between the County and the Contractor where the conditions materially differ, or involve hazardous waste, or a decrease or increase in the Contractor's cost of, or the time required for performance of any part of the work, the Contractor shall not be excused any scheduled completion date provided for by the Contract, but shall proceed with all work to be performed under the Contract. The Contractor retains any and all rights provided either by the Contract or by law pertaining to the resolution of disputes and protests between the contracting parties.

**J. CONTRACTOR GENERATED HAZARDOUS WASTE**

The Contractor is responsible for the proper handling, storage, transportation (per all Federal, State and Local Regulations), and disposal of any hazardous wastes, liquid wastes or nuisance wastes (i.e. finely divided, powdery/dusty materials, strong odor, etc.) it generates on County property or elsewhere when performing work on the County's behalf.

The Contractor must have an OC Waste & Recycling Safety Officer reviewed and County approved Emergency/Contingency Plan for handling spills of hazardous, liquid or nuisance materials it is using while working on County property or elsewhere when performing work on the County's behalf. This shall include proper handling, removal and disposal of these materials per all applicable Federal and State requirements. The Plan shall also include emergency notification to County staff and emergency personnel.

The spill-damaged area(s) must be restored/repared to its original condition by the Contractor in a correct and timely manner and to the satisfaction of the County.

The Contractor shall provide copies of all manifests, bills of lading, etc. to the County upon request to verify proper disposal to a licensed, permitted facility has occurred.

The County has the authority to perform inspections of the Contractor's work area at any time to insure all applicable regulations are being adhered to.

The Contractor is responsible for training their employees, as required by OSHA CCR Title 8, in the proper handling, storage, transportation and disposal of hazardous materials. These employees must also be trained in the Emergency/Contingency Plan and know immediate response procedures should a release occur.

The Contractor shall keep emergency response equipment and materials available in the working area, should a release occur.

**K. FUGITIVE DUST EMISSION CONTROL**

The Contractor shall comply with the requirements of the OC Waste & Recycling Fugitive Dust Emission Control Plan in conformance with the SCAQMD Rule 403. The Contractor shall also notify OC Waste & Recycling of any condition that could lead to noncompliance with the permit requirements.

If the Contractor fails or refuses to correct the noncompliance immediately, OC Waste & Recycling may terminate the Contractor's right to proceed with the work, by written notice to the Contractor. In such event, OC Waste & Recycling may take over the work and prosecute the same to completion, by Contract or otherwise at the Contractor's expense, and may take possession of and utilize in completing the work such materials, appliances, and plants as may be on the site of the work and necessary therefore. Whether or not the Contractor's right to proceed with the work is terminated, the Contractor and the Contractor's Sureties shall be liable for any damage to the County resulting from the Contractor's refusal or failure to complete the work within the specified time. The Contractor shall not be entitled to any time extensions or compensation for any cost due to any such action as a result of the Contractor's failure to comply with those provisions of the OC Waste & Recycling Fugitive Dust Emission Control Plan within the Contractor's control. The Contractor shall be responsible for ensuring that all Subcontractor(s) comply with the provisions of this section. The Contractor shall be liable for any action or fine imposed by the SCAQMD on those incidents of noncompliance that are within the Contractor's area of responsibility.

OC Waste & Recycling's Fugitive Dust Emission Control Plan (SCAQMD Rule 403-Fugitive Dust-April 1993) is available for Contractor's review in the offices of the Site PM.

**L. BIOLOGICAL AND HABITAT PROTECTION**

OC Waste & Recycling will inform the Contractor of any biological resources that would or could be impacted by the project, and specify any required mitigation measures or procedures to protect those resources during construction. The Contractor shall be responsible for complying with these protection measures, and for ensuring that all Subcontractors also comply. The County has the authority to perform inspections of the Contractor's work area at any time to ensure that these measures or procedures are being followed.

**M. MAINTENANCE FACILITY AND WORK AREA**

Maintenance facility areas have been designated at the Landfill for the purpose of maintaining County equipment. This area is intended to be available for use by the County's Equipment Maintenance Contractor and for other Contractors and haulers only upon permission and at the convenience of OC Waste & Recycling. Any Contractor permitted to utilize this area shall inspect the area and comply with any and all provisions of these Regulatory Compliance Section Articles. All Contractors shall keep the facility clean. If this facility becomes unavailable to the County's Equipment Maintenance Contractor for any reason, the County's Equipment Maintenance Contractor shall be provided an alternate location acceptable to the Site PM. No such guarantee of an alternate location is made to any other Contractor or hauler by the County. All costs related to relocating the facility is the sole responsibility of the County's Equipment Maintenance Contractor and shall be included as part of the fixed rate Contract.

Any damage or repairs caused by the Contractor or his vendors/suppliers to the designated maintenance area or other landfill facilities/projects shall be paid for or repaired by the Contractor to the satisfaction of OC Waste & Recycling. All construction and/or replacement shall be done with materials and equipment of the same kind constructed or product installed. If the Contractor does not repair the damaged facility/area within thirty (30) calendar days, the Contractor shall pay for all construction/installation and related costs performed by the County by direct deduction plus a five percent (5%) administration fee from the monthly invoice or by invoiced separate payment. Any facility considered crucial to the operation of the landfill must be repaired immediately and costs shall be paid by direct deduction plus a five percent (5%) administrative fee as above indicated in the same manner.

The Contractor shall be responsible for maintaining clean equipment and a clean working area. Removal of contaminated soil as a result of maintenance activities shall be the sole responsibility of the Contractor and shall be mitigated to OC Waste & Recycling's satisfaction immediately following written notice from the Site PM. The area of contamination may be tested and certified by a third independent party qualified to conduct the evaluation. The proposed certifying firm shall submit qualifications to the Site PM for acceptance and approval. All costs associated with contaminated soil removal, disposal and certification, if necessary, shall be the sole responsibility of the Contractor. Prior to removal, the Contractor must provide a manifest of transport showing legal disposal of contaminated material. A copy of the manifest, certified and approved by the disposal location, shall be provided to OC Waste & Recycling prior to shipment. If the manifest is not submitted,

OC Waste & Recycling will withhold or deduct directly the estimated cost of removal and disposal from monthly invoice, plus five percent (5%) administration fee until the manifest or appropriate documentation is submitted by the Contractor.

Upon written notice from the Site PM, if the Contractor does not comply with the removal of the contaminated soil immediately, OC Waste & Recycling will remove, process, transport, and certify the material as stated above and all costs incurred by OC Waste & Recycling for removal and disposal, plus a five percent (5%) administrative fee will be deducted directly from the Contractor's monthly invoice or through supplemental payment as approved by the Site PM.

The Contractor shall be responsible for the storage and protection of any and all products in accordance with manufacturer instructions; product seals and labels shall be intact and legible, and sensitive products shall be

stored in weather tight, climate controlled enclosures. The Contractor shall arrange storage of products to permit access for inspection by OC Waste & Recycling or enforcement agency personnel.

**N. Red Imported Fire Ant Interior Quarantine of Orange County**

The Contractor shall be responsible for strict compliance with the quarantine of the County of Orange for the red imported fire ant as defined in the California Food and Agricultural Code in Division 4, Chapter 3, Subchapter 4, Article 4, Section §3432 incorporated herein by reference with regards to the quarantine area, the commodities covered, and the restriction on movement, possession and sale of commodities covered. Violation of any provision of this Article of this Contract and/or the State mandate by the Contractor shall require the Contractor to bear the full financial responsibility of any assessed fine or penalty on the County, indemnify the County by the completion and submission for County approval of an acceptable, detailed, incident report within five working days of the date of the violation or not later than five working days from the date of the notification of the violation, whichever is the later.

## **ATTACHMENT B COUNTY SUPPLIED ITEMS & RESOURCES**

County shall provide assistance to Contractor in the following areas:

- Soil material for backfill and construction of berms and other system features.
- Current topography and survey information for use in potential design elements.
- Facilities for disposal of drilling & excavation spoils at no cost to Contractor.
- Any required permits for drilling and construction work to be completed by Contractor at the Construction site(s).

**ATTACHMENT C  
COST/COMPENSATION  
FOR CONTRACTOR SERVICES**

**Section I: Compensation**

This is a fixed ceiling, time and materials Contract for Landfill Gas Services for Central Region Landfills as provided in Attachment A, Scope of Work, for the County of Orange, OC Waste & Recycling.

The Contractor agrees to accept the compensation specified herein as full remuneration for performing all services and furnishing all staffing and materials called for; and for any reasonably foreseeable difficulties, which may arise or be encountered in the prosecution of the services; and for performance by the Contractor of all its duties and obligations hereunder.

The ceiling amount of this Contract shall include all expenses related to the performance of work and services required to meet the tasks and deliverables as set forth in Attachment A, Scope of Work. The County shall have no obligation to pay any sum in excess of said ceiling price, unless authorized by a written modification issued in accordance with Article 8 of this Contract. Labor hours and other costs incurred to complete the services and materials as set forth in this Contract, which exceed the total ceiling amount of this Contract, shall be borne by Contractor.

All extra work resulting in an increase in the Contract total ceiling amount shall be authorized by written modification to this Contract. Said modification shall be issued by the County Of Orange, Purchasing Agent or his designee and may be subject to approval by the County Board of Supervisors.

**Section II: Payment and Invoicing**

**A. Invoicing Instructions**

Invoices and supporting documentation are to be addressed to:  
County Of Orange/OC Waste & Recycling  
Attn: Accounts Payable  
300 N. Flower Street, Suite 400  
Santa Ana, CA 92703

The Site PM or designee is responsible for approval of invoices and subsequent submittal of invoices to the Auditor-Controller for processing payment.

Each invoice shall identify the Contractor name, services itemized and detailed information providing the amount being invoiced.

Submit invoices electronically, via email to the following email address:  
[ocwrinvoice@ocwr.ocgov.com](mailto:ocwrinvoice@ocwr.ocgov.com)

**Payment (Electronic Funds Transfer EFT):** The County offers Contractor the option of receiving payment directly to their bank account via an Electronic Fund Transfer (EFT) process in lieu of a check payment. Payment made via EFT will also receive an Electronic Remittance Advice with the payment details via e-mail. An e-mail address will need to be provided to the County via an EFT Authorization Form. To request a form, please contact the Deputy Purchasing Agent. Upon completion of the form, please mail, fax or email to the Deputy Purchasing Agent.

**B. Acceptable invoicing format**

Contractor may bill on the standard invoice form, but the following references shall be made:

- Contract number
- Contractor's name and address
- Task or sub task number
- Copy of pre-approved task order quote (signed by OC Waste & Recycling Site PM)
- Detailed description of tasks/services and deliverables
- Name of site and address where services were rendered
- Date of service
- Cost per task
- Total invoice amount

The responsibility for providing an acceptable invoice to the County of Orange for payment rests with Contractor. Incomplete or incorrect invoices are not acceptable and will be returned to Contractor for correction. The invoice shall be verified by the OC Waste & Recycling Site PM and is subject to routine processing requirements of the County. Payments made by the County shall not preclude the right of the County from thereafter disputing any items or services involved or billed under this Contract and shall not be construed as acceptance of any part of the services.

Each invoice will have a unique invoice number and will include the following information:

- Contractor's vendor code
- Master Contract Number (MA-299-18011418)
- Contractor's name and address including email address
- Contractor's remittance address, if different from a. above
- Name of County agency/department
- Delivery/Service address
- All invoices shall reference the Task Number and the date of service
- Product/services description that matches the description of the order
- Quantity, Unit of measure and Unit price that match those specified by the order and daily construction logs
- Sales tax, if applicable
- Freight/delivery charges, if applicable
- Total amount

Contractor shall submit separate invoices for work completed. Contractor shall not combine orders when invoicing the County. Each invoice shall only reference one and only one order number. Invoices that reference multiple County order numbers shall be rejected and returned to Contractor. Invoicing and payment related questions shall be directed to Auditor-Controller/Accounts Payable at the address shown above.

For each emergency and non-emergency visit, Contractor shall include back-up consisting of:

- Personnel name(s)
- Date of visit, time spent, and the time of day
- Reason(s) for the visit
- Receipts of materials/parts procured and/or specialized equipment/tools rented
- Subcontractor's invoice(s)



All the costs on each invoice will be separate and itemized with reference to the task number and scope of work section. Invoice documentation shall include, but is not limited to the following:

- Item Number, if available
- Daily Logs
- Description of Services
- Date of Service, Completion of Service, and duration
- Copy of Task Order Proposal, pre-approved by Site PM (if applicable)
- Labor Cost per Hour, job title and hourly rate
- Material Costs (including any back-up documentation such as vendor's invoice, delivery/packing slip as required)
- Subcontractor Costs, if applicable
- Equipment Costs, if applicable
- Mobilization/Demobilization, if applicable
- Total Invoice Amount

All emergency and non-emergency services will have a backup sheet describing the name of the person; log sheets, time spent, reason for the visit, the time of the day, and charges for each visit. Include any supporting documentation as required herein, such as Site PM's authorization.

### **C. Terms**

The Contractor shall submit an invoice monthly in arrears. Billing shall cover services and/or goods not previously invoiced. Payment due to the Contractor will be made within **forty-five (45)** days after receipt of a correctly submitted invoice in a format acceptable to the County of Orange and verified and approved by the Site PM or designee and subject to routine processing requirements. The Contractor shall be responsible to provide an acceptable invoice.

Payments made by the County Of Orange shall not preclude the right of the County from thereafter disputing any items or services involved or billed under this Contract, and shall not be construed as acceptance of any part of the services.

### **D. Labor Requirements**

The hourly and/or per call rate(s) provided in Rate Sheets, Part III, Labor, shall include direct and indirect labor charges, truck, all necessary equipment, tools, overhead, travel, other expenses, and all profit applicable to services identified by Contractor. Overtime will not be paid on non-emergency response requests, unless specifically authorized by Site PM at the time the request for service is initiated.

Straight time is eight hours a day. The start time and the lunchtime are flexible depending upon the nature of the work. Overtime is any time after the straight time hours on weekdays, all day Saturday and Sunday, and will only be paid for emergency or time and materials work. The Contractor must obtain prior written pre-approval from OC Waste & Recycling Project Manager before working overtime except on emergency calls. Holiday time may be charged on the County of Orange declared holidays only.

Unauthorized visits by Contractor and its personnel to coordinate other business not directly related to the projects described, and required in the SOW will not be compensated for by County for time spent at the sites.

No Contractor personnel shall be allowed to assume a title other than what was agreed upon prior to the start of the Contract term and shall adhere to the experience requirements established by County stated under Contractor Requirements.

**E. Subcontractor Costs**

**When pre-approved by the County Site PM**, the use of subcontractors or specialized services shall be specified in a task order and shall be reimbursed at actual cost plus 10 % markup for services, equipment, etc. not listed in the Rate Sheets below.

**F. Material Costs**

**When approved by the County Site PM**, all parts and materials purchased by the Contractor or by its subcontractor, shall be reimbursed at actual cost plus 10 %. All parts shall be F.O.B Destination.

The above markup may be applied **only** to the actual cost of the parts or materials, excluding tax and freight. No additional cost or mark-up will be applied to the sales tax amount and freight. Contractor shall not be reimbursed for any administrative charges in procuring of materials. The Contractor is to provide with every invoice, a copy of the supplier's invoice for any part costing \$100.00 or more.

All replacement parts shall be new, except when rebuilt or remanufactured parts are most cost effective and pre-authorized by the County. The Contractor is to provide with every invoice, a copy of the supplier's invoice.

**NO MARKUP SHALL BE ALLOWED FOR SERVICES OR EQUIPMENT LISTED IN THE RATE SHEETS, PARTS I, II OR III.**

**G. Equipment Rental**

**When pre-approved in writing by the County Site PM**, miscellaneous types of equipment may be rented by the Contractor or by its subcontractor and shall be reimbursed at actual cost plus 10% Markup. Equipment identified in the Rate Sheet, Part III Equipment Rates, may be billed at a higher rate if pre-approved in writing by the County PM and as justified due to market changes or fuel charges. The Contractor may be required to provide with an invoice for rental equipment a copy of the supplier's invoice.

The above markup may be applied only to the cost of the equipment rental, fuel, delivery and pick up. All equipment shall be FOB destination. Equipment rental charges shall include all routine services, maintenance, and preventative maintenance.

**H. Warranty**

Contractor shall warrant all labor and materials used in the work for a period of one (1) year (or in accordance with Contractor's or Manufacturer's Warranty, whichever is longer) after completion of repairs.

<b>RATE SHEET – PARTS I &amp; II</b> <b>ROUTINE OM&amp;M AND SCAQMD 1150.1</b> <b>MONITORING &amp; REPORTING</b>			
No.	Description	Unit	Estimate No. of Units/Year
I	<b>ROUTINE OM &amp; M</b>		
	(A) Santiago Canyon	Per Month	12
II	(B) Gothard Street	Per Month	12
	<b>SCAQMD Rule 1150.1 Monitoring and Reporting</b>		
	<b>(A) Frank R. Bowerman</b>		
	1) Integrated surface Sampling	Per Grid	258 x 4
	2) Instantaneous Surface Sampling	Per Grid	258 x 4
	3) Perimeter Probe Monitoring	Per Port	57 x 12
	4) Raw Landfill Gas Sampling	Per Unit	1 x 4
	5) Probe Sampling	Per Unit	1 x 4
	6) Ambient Air Sampling	Per Unit	2 x 4
	7) Compliance Review LFG Data [per quarter]	Per Unit	4
	<b>(B) Santiago Canyon</b>		
	1) Integrated surface Sampling	Per Grid	108 x 4
	2) Instantaneous Surface Sampling	Per Grid	108 x 4
	3) Perimeter Probe Monitoring	Per Port	65 x 12
	4) Raw Landfill Gas Sampling	Per Unit	1 x 4
	5) Probe Sampling	Per Unit	2 x 4
	6) Ambient Air Sampling	Per Unit	1 x 4
	7) Annual Source Testing/Reporting	Per Unit	1
	<b>(C) Gothard Street</b>		
	1) Integrated surface Sampling	Per Grid	9 x 1
	2) Instantaneous Surface Sampling	Per Grid	9 x 1
	3) Perimeter Probe Monitoring	Per Port	18 x 12
	4) Raw Landfill Gas Sampling	Per Unit	1 x 1
	5) Probe Sampling	Per Unit	1 x 4
	6) Ambient Air Sampling	Per Unit	2 x 1
	<b>(D) Cannery Street</b>		
	1) Integrated surface Sampling	Per Grid	16 x 1
	2) Instantaneous Surface Sampling	Per Grid	16 x 1
	3) Perimeter Probe Monitoring	Per Port	20 x 12
	4) Raw Landfill Gas Sampling	Per Unit	1 x 1
	5) Probe Sampling	Per Unit	1 x 4
	6) Ambient Air Sampling	Per Unit	2 x 1
VIII	<b>LANDFILL GAS DATA MANAGER</b>		
	Monthly Fee to provide Landfill Gas Data Manager services for Frank R. Bowerman and Santiago Landfills.	Per Month	12
<b>TOTAL MONTHLY LUMP SUM FEE FOR ALL SITES FOR ROUTINE SERVICES      \$      54,643.00</b>			

<b>RATE SHEET - PART III INSTALLATION</b>		
<b>Description</b>	<b>Unit</b>	<b>Installation cost (Includes Labor and Equipment)</b>
<b>HEADERS, SUBHEADERS, LATERALS, MISC.</b>		
<b>24" Solid HDPE SDR 17</b>		
Above Grade	LF	\$ 32.81
Buried 3' min. to top of pipe w/refuse hauling. Price assumes trench depth $\leq 5.5'$ and no mechanical shoring. <u>Dump truck Accessible</u>	LF	\$ 42.65
<b>24" Viton Isolation Valve (Epoxy Coated Cast Iron) incl. back-up rings, adapters, seals, gasket, SS bolt pack, 5' valve stem, gear box, seats</b>		
Above Grade	SET	\$ 929.65
Below Grade (min 3' to top of valve)	SET	\$ 956.99
<b>24" Flange HDPE</b>	EA	\$ 907.50
<b>24" Flange Set HDPE including adapters, seals, DI rings, SS bolt pack, gasket</b>		
Standard	SET	\$ 1,476.50
Blind	SET	\$ 929.65
<b>24" Tee HDPE</b>	EA	\$ 1,410.87
<b>24" Elbow HDPE</b>		
90 Degree	EA	\$ 1,257.76
45 Degree	EA	\$ 1,257.76
22 Degree	EA	\$ 1,257.76
<b>24" x 18" Reducer HDPE</b>	EA	\$ 953.00
<b>24" x 12" Reducer HDPE</b>	EA	\$ 953.00
<b>24" Electro-fusion coupling</b>	EA	\$ 1,405.00
<b>18" Solid HDPE SDR 17</b>		
Above Grade	LF	\$ 22.97
Buried 3' min. to top of pipe w/o refuse hauling. Price assumes trench depth $\leq 5.5'$ and no mechanical shoring. <u>Dump truck accessible</u>	LF	\$ 30.62
<b>18" Viton Isolation Valve (Epoxy Coated Cast Iron) incl. back-up rings, adapters, seals, gasket, SS bolt pack, 5' valve stem, gear box, seats</b>		
Above Grade	SET	\$ 1,531.18
Below Grade (min 3' to top of valve)	SET	\$ 1,695.24
<b>18" BUNA N Isolation Valve (Epoxy Coated Cast Iron) incl. back-up rings, adapters, seals, gasket, SS bolt pack, 5' valve stem, gear box, seats</b>		
Above Grade	SET	\$ 1,531.18
Below Grade (min 3' to top of valve)	SET	\$ 1,695.24
<b>18" Flange HDPE</b>	EA	\$ 810.70
<b>18" Flange Set HDPE including adapters, seals, DI rings, SS bolt pack, gasket</b>		
Standard	SET	\$ 864.02
Blind	SET	\$ 634.35
<b>18" Tee HDPE</b>	EA	\$ 683.56
<b>18" Elbow HDPE</b>		
90 Degree	EA	\$ 623.41
45 Degree	EA	\$ 623.41

<b>RATE SHEET - PART III INSTALLATION</b>		
<b>Description</b>	<b>Unit</b>	<b>Installation cost (Includes Labor and Equipment)</b>
<b>22 Degree</b>	<b>EA</b>	<b>\$ 623.41</b>
<b>18" x 18" x 18" Wye HDPE</b>	<b>EA</b>	<b>\$ 710.91</b>
<b>18" x 12" x 18" Reducing Tee HDPE</b>	<b>EA</b>	<b>\$ 390.45</b>
<b>18" Electro-fusion coupling</b>	<b>EA</b>	<b>\$ 557.79</b>
<b>12" Solid HDPE SDR 17</b>		
<b>Above Grade</b>	<b>LF</b>	<b>\$ 13.12</b>
<b>Buried 3' min. to top of pipe w/o refuse hauling. Price assumes trench depth <math>\leq</math> 5.5' and no mechanical shoring. Dump truck accessible.</b>	<b>LF</b>	<b>\$ 27.34</b>
<b>12" BUNA N Isolation Valve (Epoxy Coated Cast Iron) incl. back-up rings, adapters, seals, gasket, SS bolt pack, 5' valve stem, gear box, seats</b>		
<b>Above Grade</b>	<b>SET</b>	<b>\$ 973.00</b>
<b>Below Grade (min 3' to top of valve)</b>	<b>SET</b>	<b>\$ 1,173.00</b>
<b>12" Flange HDPE</b>	<b>EA</b>	<b>\$ 444.40</b>
<b>12" Flange Set HDPE including adapters, seals, DI rings, SS bolt pack, gasket</b>		
<b>Standard</b>	<b>SET</b>	<b>\$ 393.73</b>
<b>Blind</b>	<b>SET</b>	<b>\$ 339.05</b>
<b>12" Tee HDPE</b>	<b>EA</b>	<b>\$ 398.00</b>
<b>12" Elbow HDPE</b>		
<b>90 Degree</b>	<b>EA</b>	<b>\$ 393.73</b>
<b>45 Degree</b>	<b>EA</b>	<b>\$ 393.73</b>
<b>22 Degree</b>	<b>EA</b>	<b>\$ 393.73</b>

<b>RATE SHEET - PART III INSTALLATION</b>		
<b>Description</b>	<b>Unit</b>	<b>Installation cost (Includes Labor and Equipment)</b>
12" x 12" x 12" Wye HDPE	EA	\$ 398.00
12" Cap HDPE – butt fused	EA	\$ 220.00
12" Cap PVC	EA	\$ 26.40
12" Electro-fusion coupling	EA	\$ 306.78
8" x 12" Reducer HDPE	EA	\$ 407.00
<b>8" Solid HDPE SDR 17</b>		
Above Grade	LF	\$ 15.31
Buried 3' min. to top of pipe w/o refuse hauling. Price assumes trench depth $\leq 5.5'$ and no mechanical shoring. Dump truck accessible.	LF	\$ 29.53
<b>8" BUNA N Isolation Valve (Epoxy Coated Cast Iron) incl. back-up rings, adapters, seals, gasket, SS bolt pack, 5' valve stem, gear box, seats</b>		
Above Grade	SET	\$557.79
Below Grade (min 3' to top of valve)	SET	\$ 757.79
8" Flange HDPE	EA	\$ 297.00
<b>8" Flange Set HDPE including adapters, seals, DI rings, SS bolt pack, gasket</b>		
Standard	SET	\$ 243.00
Blind	SET	\$ 216.55
8" Tee HDPE	EA	\$ 252.64
<b>8" Elbow HDPE</b>		
90 Degree	EA	\$ 223.11
45 Degree	EA	\$ 223.11
22 Degree	EA	\$ 223.11
8" Cap HDPE – butt fused	EA	\$ 114.84
8" Cap PVC	EA	\$ 19.25
8" Electro-fusion coupling	EA	\$ 223.11
8" x 6" x 8" Reducing Tee HDPE	EA	\$ 300.77
8" x 6" Reducer HDPE	EA	\$ 243.00
<b>6" Solid HDPE SDR 17</b>		
Above Grade	LF	\$ 12.58
Buried 3' min. to top of pipe w/o refuse hauling. Price assumes trench depth $\leq 5.5'$ and no mechanical shoring. Dump truck accessible.	LF	\$ 29.53
<b>6" BUNA N Isolation Valve (Epoxy Coated Cast Iron) incl. back-up rings, adapters, seals, gasket, SS bolt pack, 5' valve stem, gear box, seats</b>		
Above Grade	SET	\$ 563.00
Below Grade (min 3' to top of valve)	SET	\$ 763.00
6" Flange HDPE	EA	\$ 192.50
<b>6" Flange Set HDPE including adapters, seals, DI rings, SS bolt pack, gasket</b>		
Standard	SET	\$ 180.46
Blind	SET	\$ 173.90

<b>RATE SHEET - PART III INSTALLATION</b>		
<b>Description</b>	<b>Unit</b>	<b>Installation cost (Includes Labor and Equipment)</b>
6" Tee HDPE	EA	\$ 216.55
6" Elbow HDPE		
90 Degree	EA	\$ 178.00
45 Degree	EA	\$ 178.00
22 Degree	EA	\$ 178.00
6" Cap PVC	EA	\$ 22.00
6" Cap HDPE - butt fused	EA	\$ 103.90
6" Electro-fusion coupling	EA	\$ 213.27
6" x 4" Elastomeric Adapters for Accu Flo whead	EA	Included in wellhead installation
6" x 4" Reducer HDPE	EA	\$ 206.80
4" Solid HDPE SDR 17		
Above Grade	LF	\$ 9.57
Buried 3' min. to top of pipe w/o refuse hauling. Price assumes trench depth $\leq 5.5'$ and no mechanical shoring. Dump truck accessible.	LF	\$ 27.89
4" Flange Set HDPE including adapters, seals, DI rings, SS bolt pack, gasket		
Standard	SET	\$ 158.59
Blind	SET	\$ 103.90
4" Tee HDPE	EA	\$ 158.59
4" Elbow HDPE		
90 Degree	EA	\$ 129.80
45 Degree	EA	\$ 129.80
22 Degree	EA	\$ 129.80
4" Branch Saddle HDPE		
x 24"	EA	\$ 412.50
x 18"	EA	\$ 412.50
x 12"	EA	\$ 339.05
x 8"	EA	\$ 339.05
x 6"	EA	\$ 339.05
4" Electro-fusion coupling	EA	\$ 213.27
4" x 3" Reducer HDPE	EA	\$ 137.00
4" x 2" Elastomeric Adapters for Accu Flo wellhead	EA	Included in wellhead installation
4" x 2" Reducer HDPE	EA	\$ 137.00
4" PVC Cap	EA	\$ 5.50
4" HDPE Cap - butt fused	EA	\$ 109.00
2" Solid HDPE SDR 11		
Above Grade	LF	\$ 4.00
Buried 3' min. to top of pipe w/o refuse hauling. Price assumes trench depth $\leq 5.5'$ and no mechanical shoring. Dump truck accessible.	LF	\$ 17.00
2" Tee HDPE	EA	\$ 143.00
2" Elbow HDPE		
90 Degree	EA	\$ 100.70
45 Degree	EA	\$ 100.70
2" HDPE Cap - butt fused	EA	\$ 88.00

<b>RATE SHEET - PART III INSTALLATION</b>		
<b>Description</b>	<b>Unit</b>	<b>Installation cost (Includes Labor and Equipment)</b>
2" Butterfly Valve with adapter and bolt pack	EA	\$ 143.00
2" SS x HDPE Transition Fitting	EA	\$ 95.70
<b>Landtec Accu Flo Wellhead PVC w/ Exact-flo valve, clamps, UV-resistant orange flexible hose Per Figures 2A &amp; 2B</b>		
3" Vertical Well Head	SET	\$ 151.78
3" Horizontal Well Head	SET	\$ 185.90
2" Vertical Well Head	SET	\$ 138.60
2" Horizontal Well Head	SET	\$ 138.60
Well ID Tag	EA	\$ 10.00
10' X 10' PVC Boot seal incl. neck clamp	EA	\$ 656.22
2" Kana Flex Hose	LF	\$ 3.00
3" Kana Flex Hose	LF	\$ 4.00
Granular Bentonite	LB	\$ 1.00
Galvanized Unistrut – Plain 1 5/8"	LF	\$ 5.00
6" Unistrut Pipe Clamp	EA	\$ 10.00
8" Unistrut Pipe Clamp	EA	\$ 8.80
<b>HORIZONTAL LFG COLLECTION SYSTEM</b>		
Horizontal Collector Mobilization/Demobilization	LS	\$ 7,109.05
<b>Perforated Trench including HDPE SDR 17 pipe, 8 oz. geofabric and gravel per Figure 2B includes refuse hauling &amp; backfilling</b>		
8-inch SDR 17	LF	\$ 32.81
6-inch SDR 17	LF	\$ 32.81
4-inch SDR 17	LF	\$ 24.06
<b>VERTICAL LFG COLLECTION SYSTEM</b>		
Drilling Mobilization/Demobilization for Vertical Wells and LFG Monitoring Probes (To, From, and Within Site) includes Carbon Filter Box	LS	\$ 8,800.00
<b>Drilling of 24" diameter borehole including refuse hauling</b>		
Less than or equal to 100' deep	LF	\$ 74.37
Over 100' deep	LF	\$ 79.84
<b>Vertical well Installation including 1-1/2" gravel, perforated and solid pipes and bentonite plug (per drawing Figure 2A Based on 100' depth). Assume perforated to be 1/3 of total depth</b>		
<b>24" borehole</b>		
4-inch SDR 11	LF	\$ 17.50
6-inch SDR 11	LF	\$ 17.50
<b>18" borehole</b>		
4-inch SDR 11	LF	\$ 17.50
6-inch SDR 11	LF	\$ 17.50
Abandonment of 18"- 24" borehole including 5' bottom bentonite plug and soil backfilling	EA	\$ 420.00
<b>LFG MONITORING PROBE</b>		
<b>Drilling of 8" diameter borehole</b>		
Less than or equal to 100' deep	LF	\$ 72.18
Over 100' deep	LF	\$ 75.47



<b>RATE SHEET - PART III INSTALLATION</b>		
<b>Description</b>	<b>Unit</b>	<b>Installation cost (Includes Labor and Equipment)</b>
Abandonment of 8" borehole or probe including 5' bottom bentonite plug and soil backfilling	EA	\$ 3,900.00
Monitoring Probe Installation Including pea gravel, perforated and solid PVC pipe, bentonite plugs, cock valves, protective casing per drawing Figure 2C based on 100' depth), and tags.	LF	\$ 22.97
<b>Note:</b> Contractor mark-up shall apply for other materials not listed on Rate Sheets. A vendor's invoice, packing, and delivery slips for all materials delivered at the site per Site PM's request shall be submitted with the Contractor's invoice. All material and installation cost estimates shall be presented and approved by the Site PM prior to start of work.		

<b>RATE SHEET - PART III</b> <b>LABOR RATES</b>				
No.	Personnel	Hourly Rate	Overtime Hourly Rate	Holiday Hourly Rate
<b>A</b>	<b>Operation and Maintenance</b>			
1	Project Manager	\$210.00	\$210.00	\$210.00
2	Assistant Project Manager	\$162.00	\$162.00	\$162.00
3	Project Foreman/Superintendent- Construction Services	\$118.00	\$177.00	\$236.00
4	Equipment Operator	\$137.00	\$206.00	\$274.00
5	Pipe Fusion Technician	\$133.00	\$200.00	\$266.00
<b>B</b>	<b>Optional Services</b>			
1	Principal Engineer	\$206.00	\$206.00	\$206.00
2	Principal Construction Services	\$186.00	\$186.00	\$186.00
3	Engineer	\$171.00	\$171.00	\$171.00
4	Construction Manager	\$170.00	\$170.00	\$170.00
5	Senior Monitoring and Operation Technician	\$122.00	\$183.00	\$244.00
6	Lead Monitoring and Operation Technician	\$135.00	\$203.00	\$270.00
7	Monitoring and Operation Technician	\$93.00	\$140.00	\$186.00
8	Senior Geologist	\$159.00	\$159.00	\$159.00
9	Geologist	\$145.00	\$218.00	\$290.00
10	Environmental Specialist	\$118.00	\$177.00	\$236.00

NOTE: Labor for Optional Services shall only be performed upon OC Waste & Recycling Site PM's request and approval.

## RATE SHEET - PART III EQUIPMENT RATES

No.	Equipment	Daily Rate	Weekly Rate	Monthly Rate
1	Excavator	\$1,197.47	\$3,407.68	\$8,127.13
2	Loader	\$1,157.51	\$3,065.71	\$7,419.51
3	Back Hoe	\$725.23	\$1,837.00	\$3,526.12
4	Dump/Roll off Truck (5 yard)	\$722.27	\$1,760.02	\$3,338.10
5	Dump/Roll off Truck (10 yard)	\$1,142.70	\$2,624.56	\$6,436.54
6	Utility Truck (1Ton or Less)	\$136.40	\$571.78	\$1,715.34
7	Fork Lift (Reach Fork Lift 6000)	\$830.34	\$1,720.05	\$3,299.62
8	Crane (14 Ton Crane/Stinger Truck)	\$1,336.70	\$2,538.77	\$6,648.30
9	Water Truck (2000 Gal.)	\$799.25	\$1,688.96	\$3,819.23
10	1"- 4" Fusion Machine (Includes Generator)	\$215.00	\$860.00	\$2,980.00
11	2"- 8" Fusion Machine (Includes Generator)	\$290.00	\$1,160.00	\$4,180.00
12	6"- 18" Fusion Machine (Includes Generator)	\$794.81	\$2,119.50	\$7,418.25
13	24" - 36" Fusion Machine (Includes Generator)	\$2,355.00	\$5,534.25	\$18,251.25
14	1"- 4" Fusion Machine (Excludes Generator)	\$100.00	\$400.00	\$1,600.00
15	2"- 8" Fusion Machine (Excludes Generator)	\$175.00	\$700.00	\$2,800.00
16	6"- 18" Fusion Machine (Excludes Generator)	N/A	N/A	N/A
17	24" – 36" Fusion Machine (Excludes Generator)	N/A	N/A	N/A
18	9.7 – KW Generator	\$115.00	\$460.00	\$1,380.00
19	Air Compressor (175 CFM or Less)	\$461.47	\$878.67	\$1,442.56
20	Squeeze Off Tool (1/2" to 2")	\$65.00	\$260.00	\$1,040.00
21	Squeeze Off Tool (3" to 4")	\$90.00	\$360.00	\$1,440.00
22	Squeeze Off Tool (6")	\$125.00	\$500.00	\$2,000.00
23	Squeeze Off Tool (8" Hydraulic)	\$765.38	\$2,001.75	\$6,947.25
24	Video Camera System Rental	\$200.00	\$850.00	\$2,700.00

Note: Equipment rates to include delivery and transport. Reimbursement shall be at above rate whether provided by Contractor or rented. These rates are for bare equipment without an operator and includes fuel.

## ATTACHMENT D SUBCONTRACTOR SERVICES

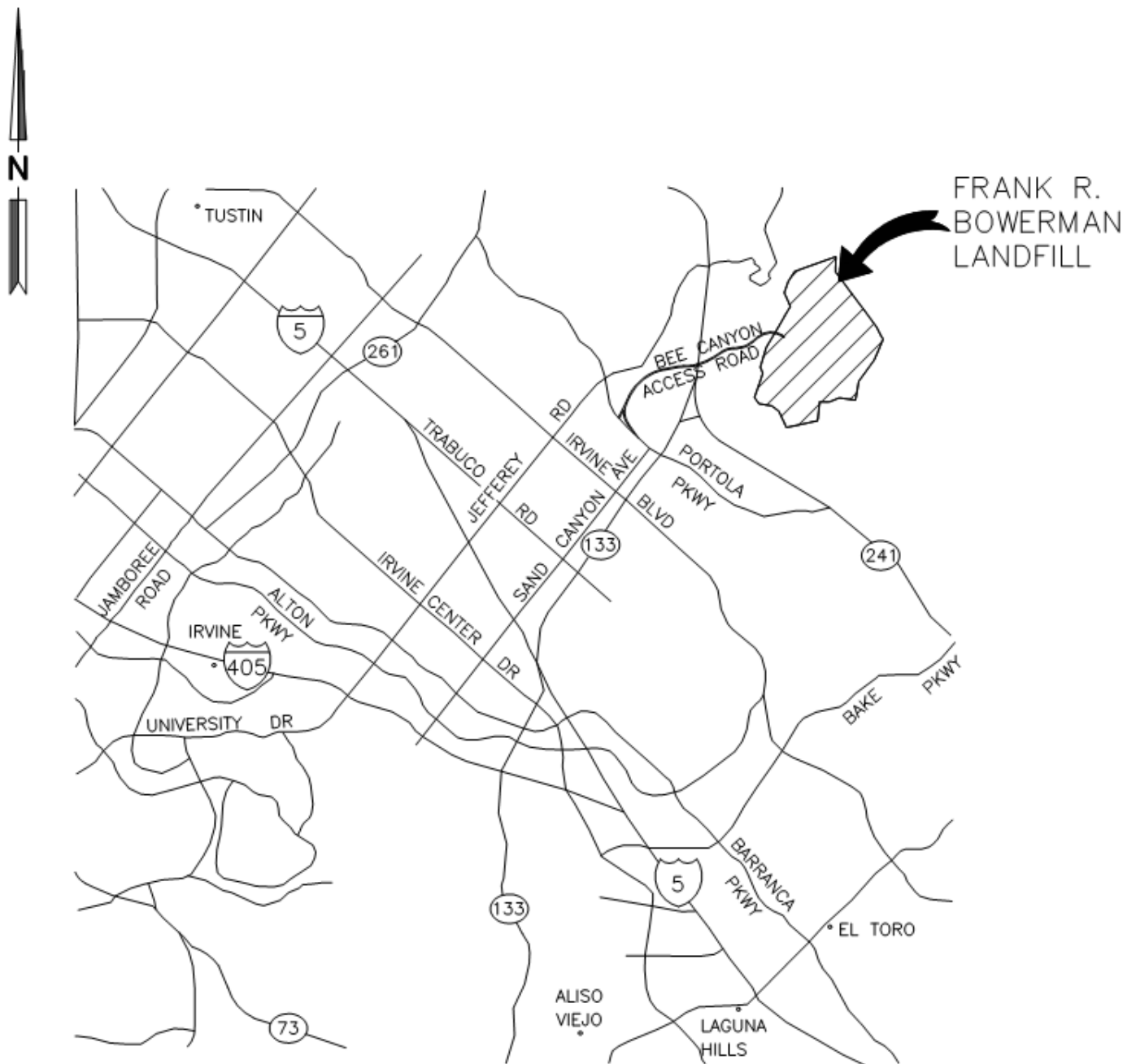
### SUBCONTRACTOR SERVICES

The Contractor has identified the following Subcontractor(s) may be the Subcontractor(s) on the job for each particular trade or subdivision of the work.

<b>Subcontractor</b>	<b>Work, Trade, Service</b>	<b>License(s)</b>	<b>Location of Shop or Service</b>
AccuLabs, Inc.	Analytical Testing Lab		118 La Porte Street, Unit C&D Arcadia, CA 91006
BC2 Environmental	Drilling Services	#969758	1150 West Trenton Ave. Orange, CA 92867
BC Laboratories	Laboratory Testing		4100 Atlas Court Bakersfield, CA 93308
Best Environmental	Source Testing	#969758	339 Stealth Court Livermore, CA 94551
Frank's Industrial Service (FIS)	Electrical Services	#700250	1426 W. 259 <sup>th</sup> Street Harbor City, CA 90710
Jim Rubino Consulting	Electrical/ Control Design	#24886	4821 Burgundy Road Woodland Hills. CA 91364
K-VAC Environmental Services, Inc.	Condensate Hauling		8910 Rochester Ave. Rancho Cucamonga, CA 91730
RES Environmental Services	1150.1 Monitoring		865 Via Lata Colton, CA 92324
SCEC	Source Testing		1 North Batavia Street Orange, CA 92867
SD Drilling	Drilling Services	#958254	24660 E. Old Julian Hwy. Ramona, CA 92065
Test America	Air Rotary Drilling	#819548	1016 E. Katella Ave. Anaheim, CA 92805
RD Construction	Concrete Work	#376705	17757 Citron Ave. Fontana, CA 92335

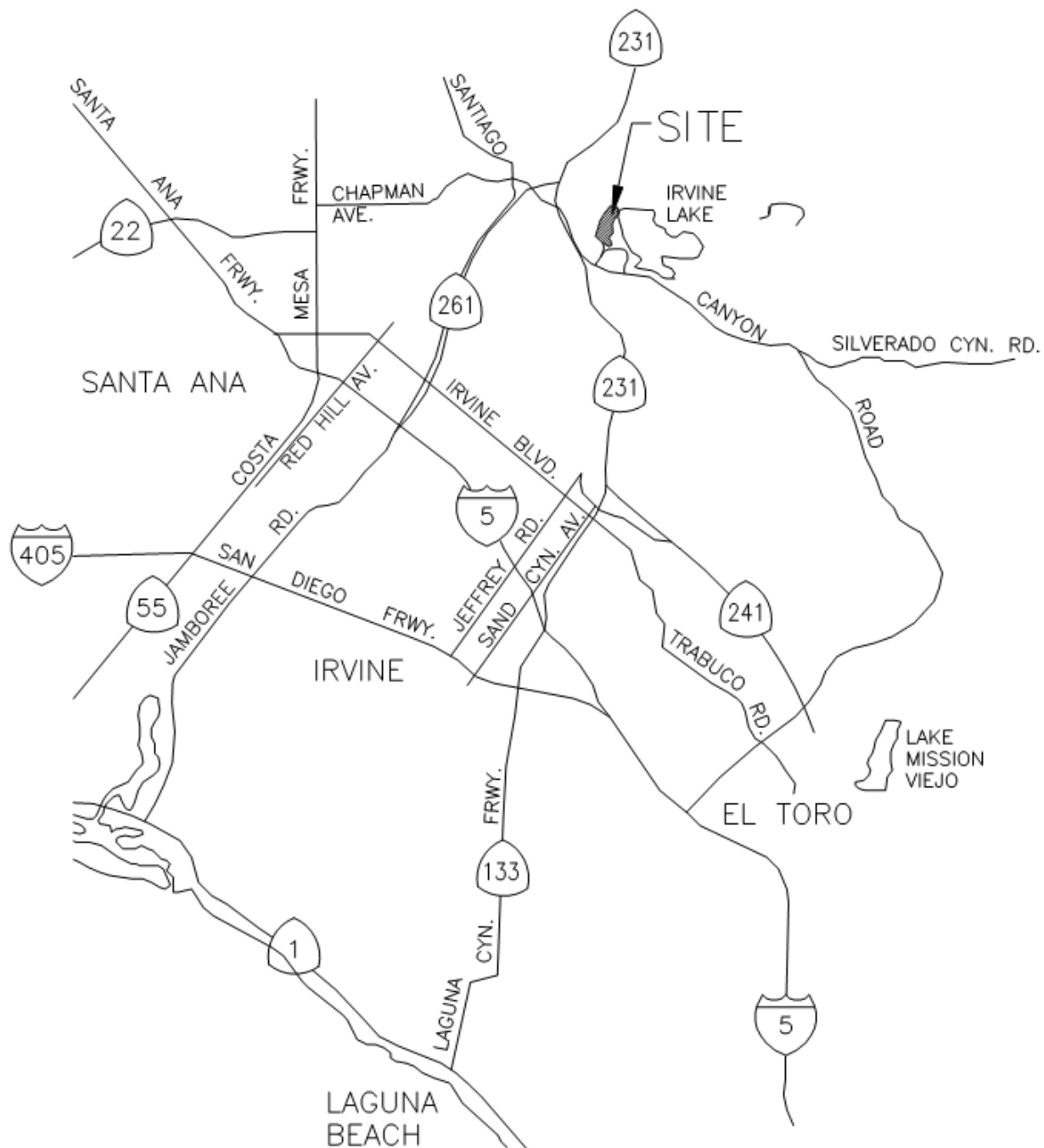
**FIGURE 1A – Frank R. Bowerman Landfill**

11002 Bee Canyon Access Rd. Irvine, CA 92602



LOCATION MAP  
NTS

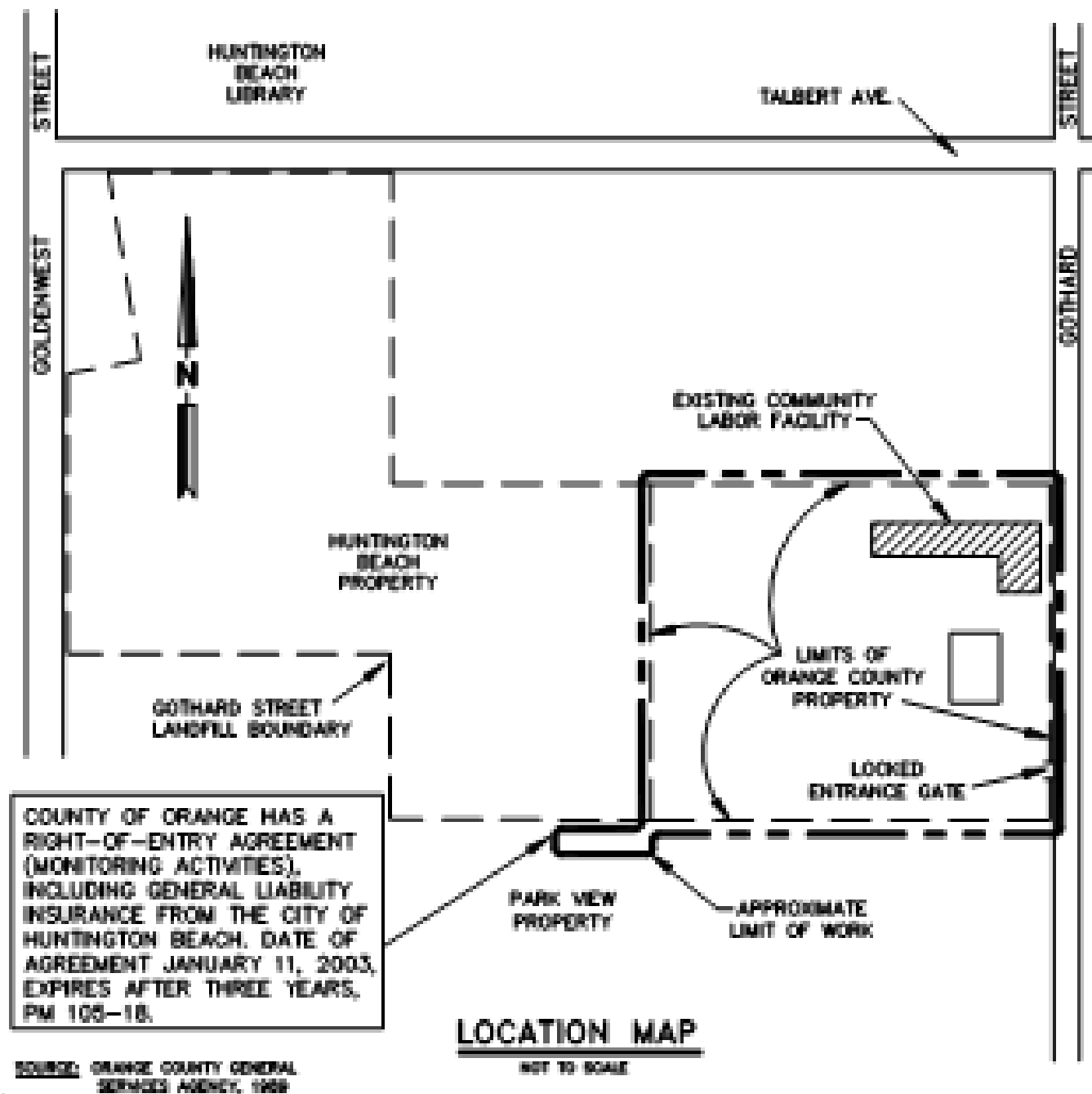
**FIGURE 1B – Santiago Canyon Landfill-3099 Santiago Canyon Rd., Orange, CA 92669**



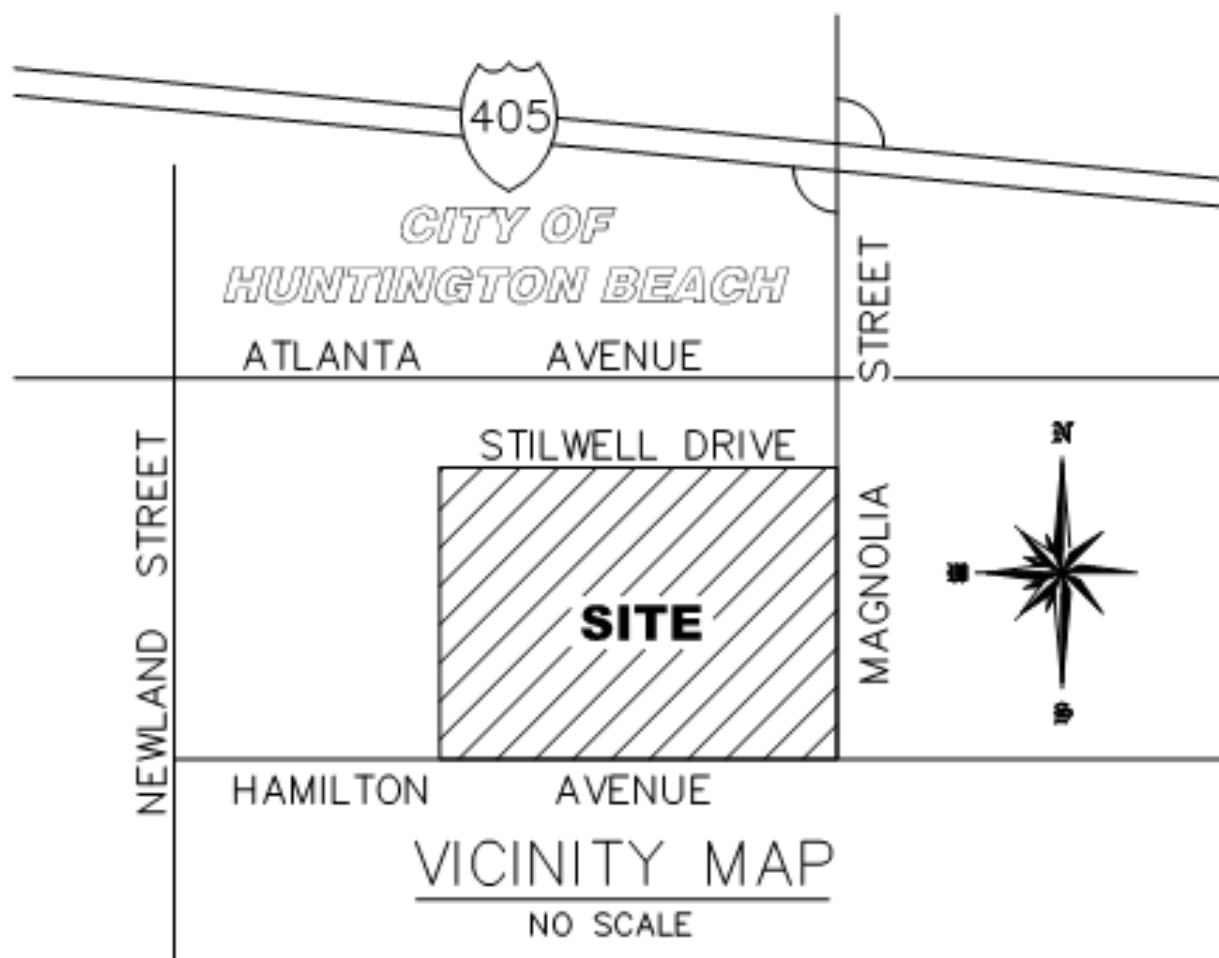
LOCATION MAP

NTS

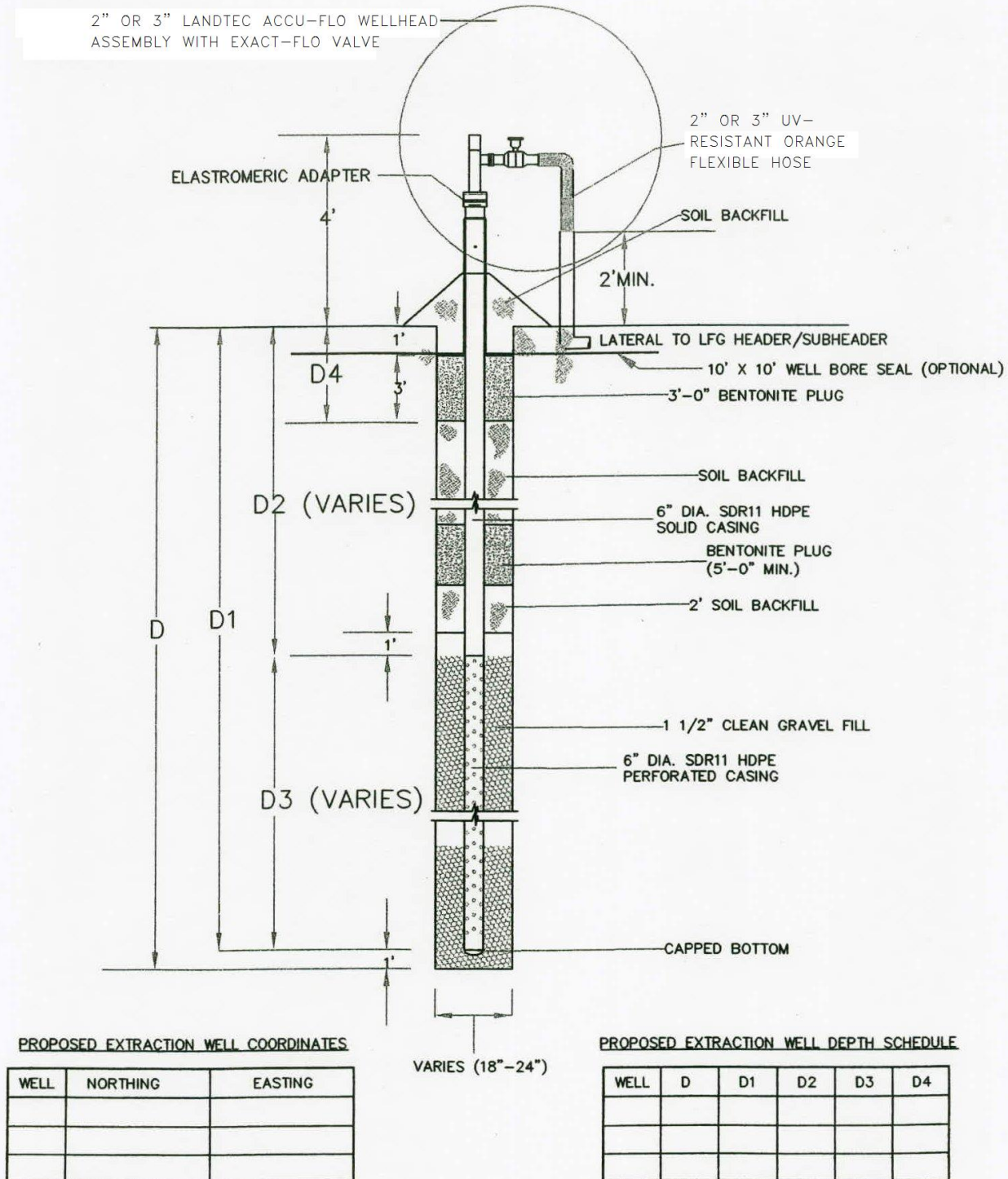
**FIGURE 1C – Gothard Street Landfill-18131 Gothard Street, Huntington Beach, CA 92648**



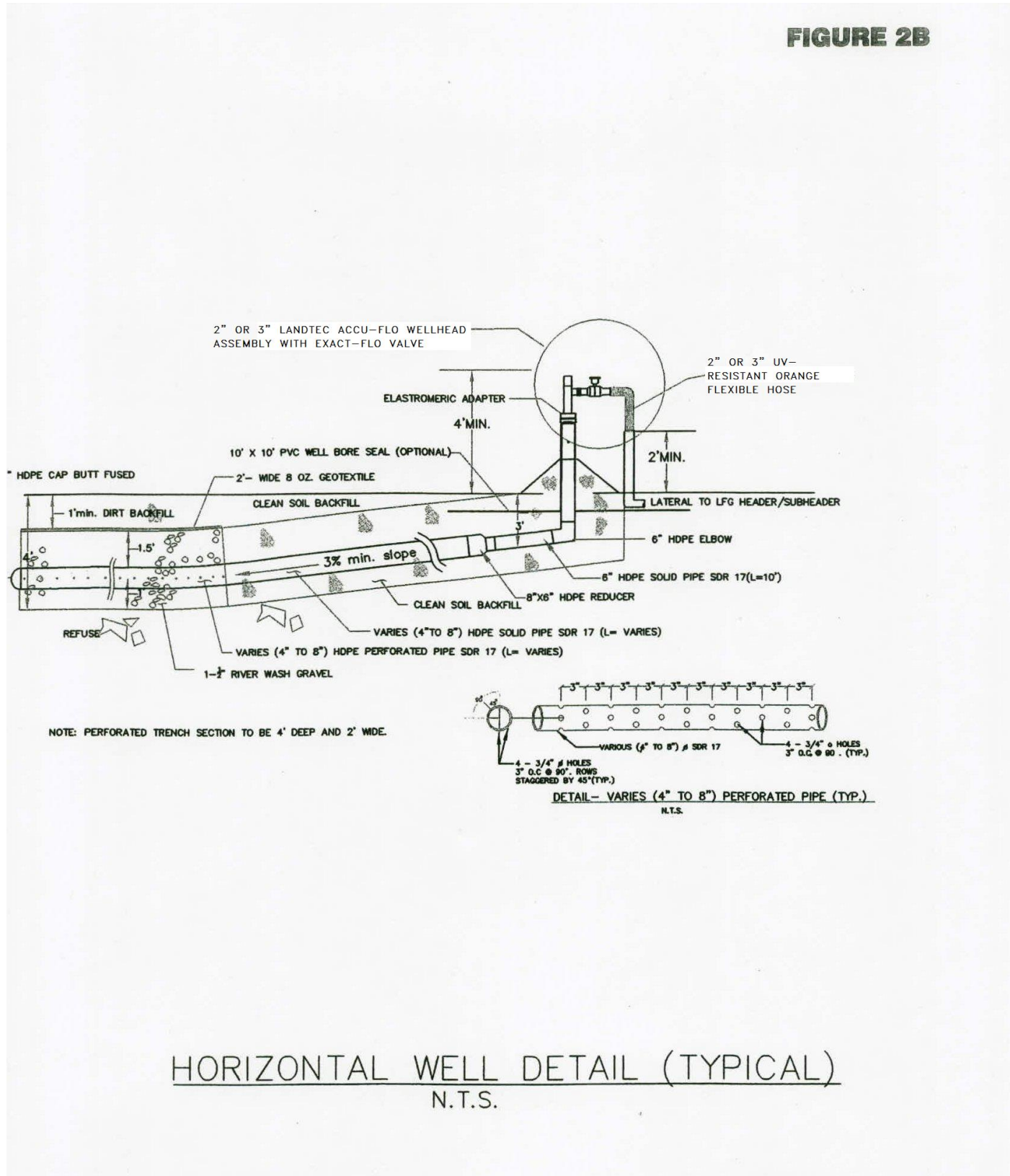
**FIGURE 1D – Cannery Street Landfill-21377 Magnolia Street, Huntington Beach, CA 92646**

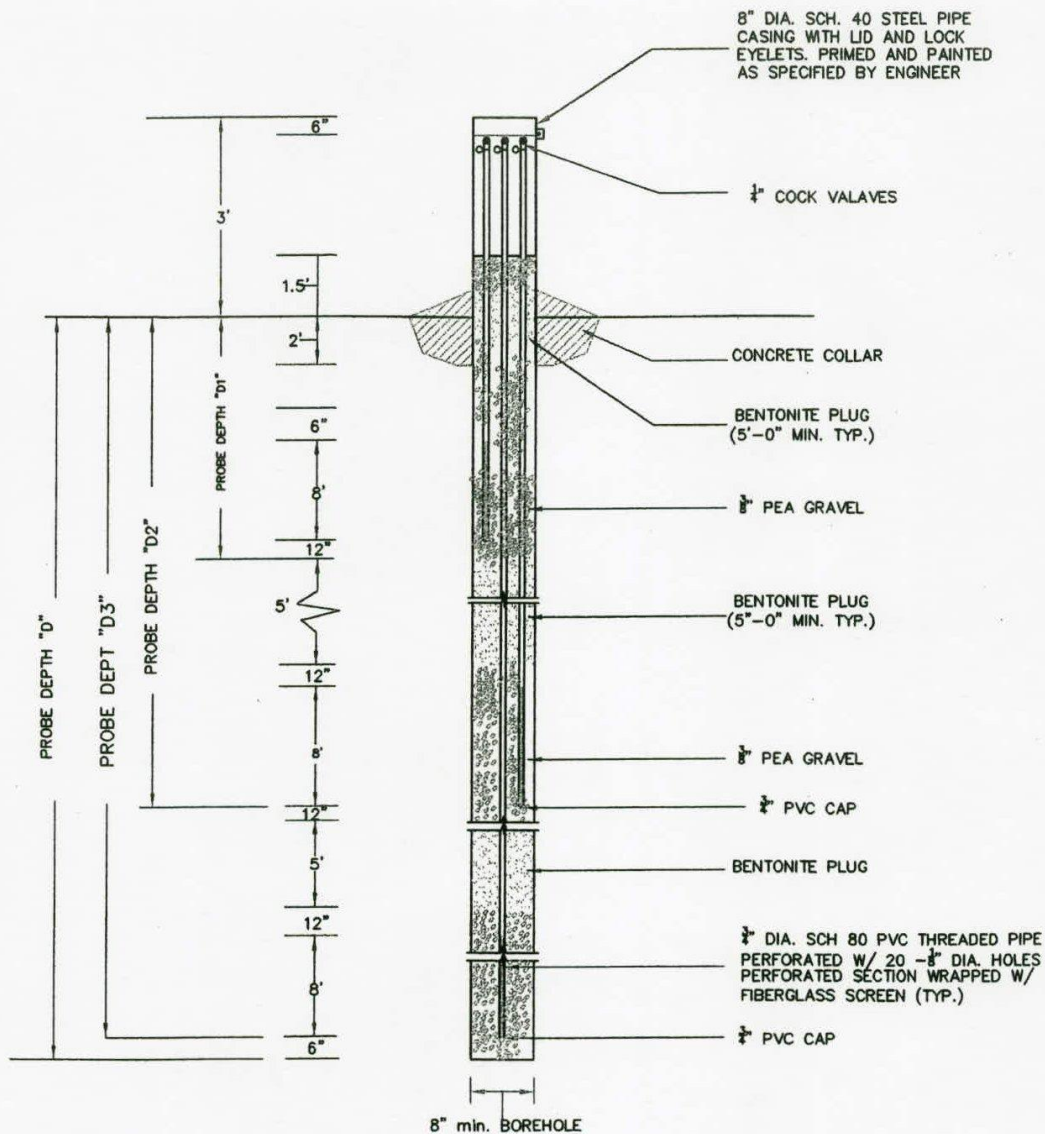




**FIGURE 2A – Vertical Well Detail****FIGURE 2A**

VERTICAL WELL DETAIL (TYPICAL)  
N.T.S.

**FIGURE 2B – Horizontal Well Detail**

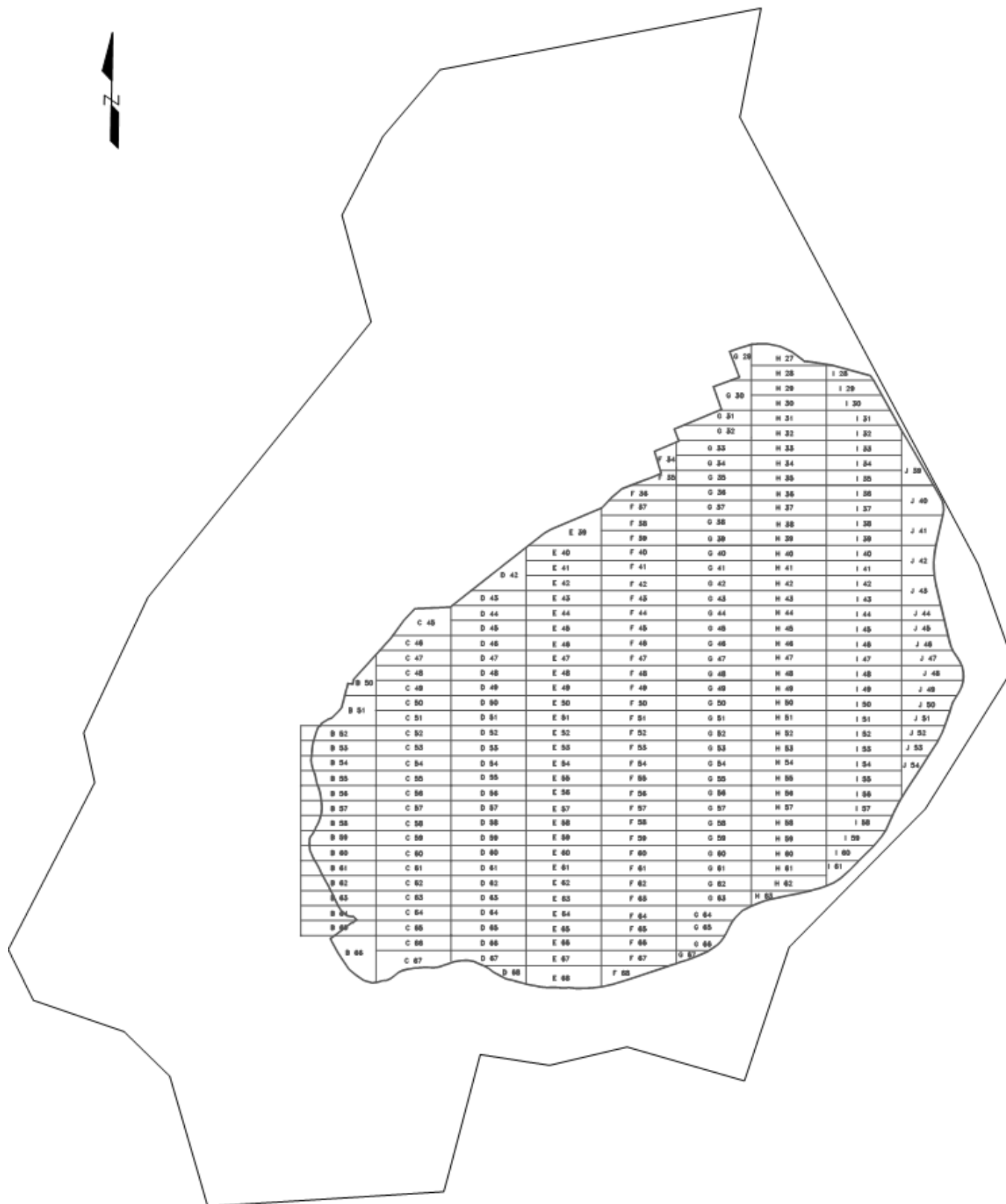
**FIGURE 2C – LFG Monitoring Probe Detail****FIGURE 2C**PROPOSED MONITORING PROBE COORDINATE

PROBE	NORTHING	EASTING

PROPOSED PROBE DEPTH SCHEDULE

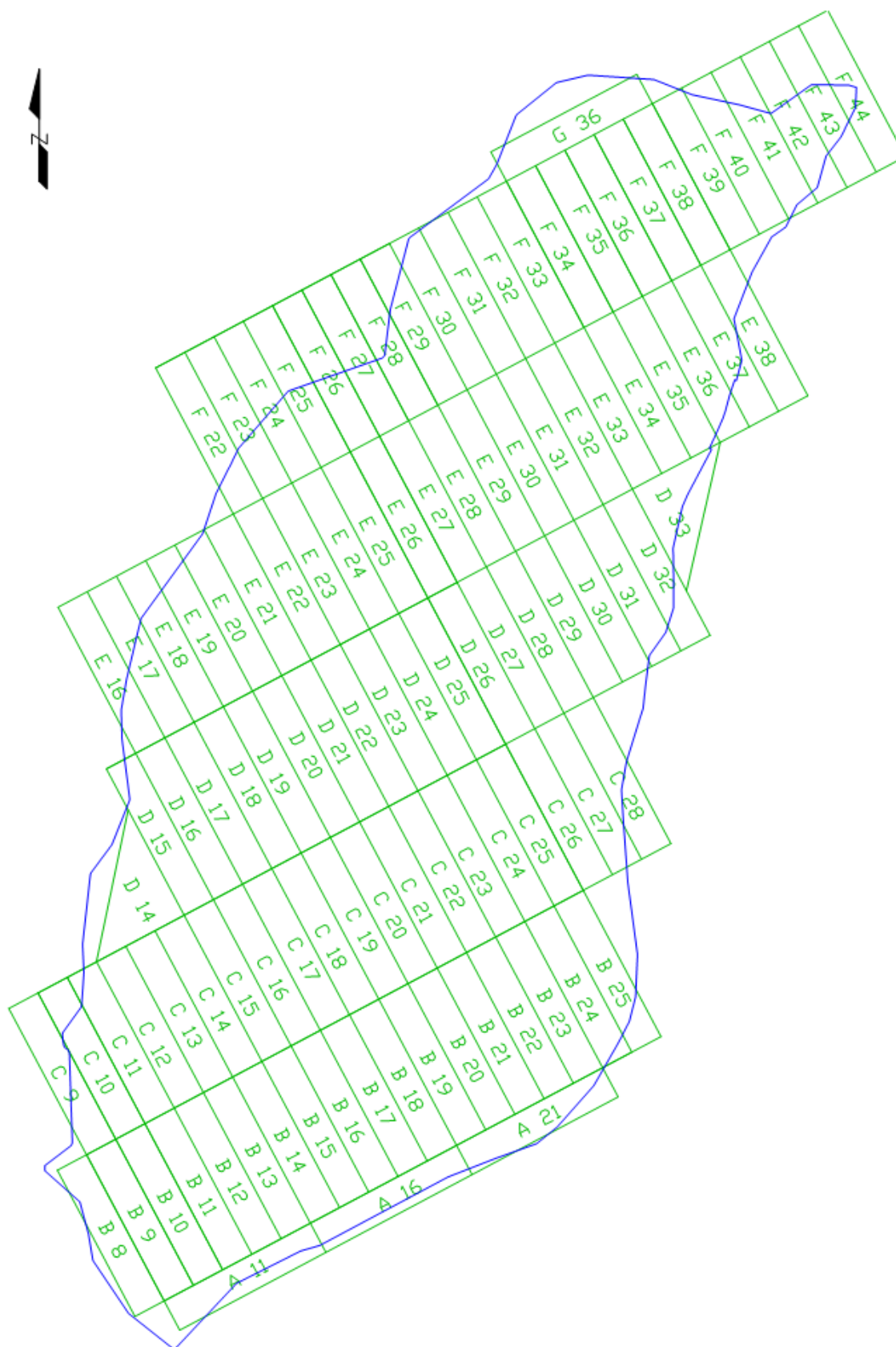
PROBE	D	D1	D2	D3

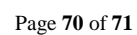
LFG MONITORING PROBE DETAIL (TYPICAL)  
N.T.S

**FIGURE 3A – Frank R. Bowerman Landfill Monitoring Grids**



**FIGURE 3B – Santiago Canyon Landfill Monitoring Grids**





**FIGURE 3C – Cannery Street Landfill Monitoring Grids**