

CONTRACT NUMBER MA-299-22011111 WITH TETRA TECH BAS, INC. FOR LANDFILL GAS SERVICES FOR SOUTH REGION

THIS CONTRACT Number MA-299-22011111 for Landfill Gas Services for South Region ("**Contract**") is made and entered into as of the date fully executed by and between the County of Orange, a political subdivision of the State of California through its OC Waste & Recycling Department, ("**County**") and **Tetra Tech BAS, Inc.**, ("**Contractor**") with a place of business located at 21700 Copley Drive, Suite 200, Diamond Bar, CA 91765. County and Contractor are sometimes referred to individually as "**Party**" or collectively as "**Parties**."

RECITALS

WHEREAS, County solicited via a Request for Proposal ("RFP") for Landfill Gas Services for South Region; and

WHEREAS, Contractor responded to the RFP and represented that Contractor is qualified to provide Landfill Gas Services for South Region to County; and

WHEREAS, Contractor agrees to provide Landfill Gas Services for South Region to County as set forth in the Scope of Work, attached hereto as Contract Attachment A and incorporated herein; and,

WHEREAS, Contractor agrees to accept payment set forth in Cost Proposal, Rates, Payment Terms, and Invoicing Instructions, attached hereto as Contract Attachment B and incorporated herein;

NOW, THEREFORE, the Parties mutually 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 adjudication to another county.
- **B.** Entire Contract: This Contract, including Attachments which are attached hereto and incorporated herein by this reference, 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 indemnities 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 Indemnities 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 or Sub-Contracting: 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 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 Contract 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 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.

Oualified 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:

| Coverage | Minimum Limits |
|---|--|
| 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 combined single limit per occurrence |
| Workers' Compensation | Statutory |
| Employers' Liability Insurance | \$1,000,000 per occurrence |
| Professional Liability* | \$1,000,000 per claims-made \$1,000,000 aggregate |

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 13or a form at least as broad naming the *County of Orange its elected and appointed officials, officers, agents and employees* as Additional Insureds, or provide blanket coverage, which will state *AS REQUIRED 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 maintained by the County of Orange shall be excess and non-contributing.
- 3) A Products and Completed Operations endorsement using ISO Form CG2037 (ed. 10/01) or a form at least as broad, or an acceptable alternative is the ISO from CG2010 (ed. 11/85).

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.

If Contractor's Professional Liability is a "Claims-Made" policy, Contractor shall agree to maintain coverage for two (2) years following the completion of the Contract.

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

Insurance certificates shall be emailed to <u>OCWRPurchasing@ocwr.ocgov.com</u>.

If the Contractor fails to provide the insurance certificates and endorsements within seven (7) days of notification by CEO/County Procurement Office or the agency/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/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 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.

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.

- **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 Countyrelated 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 Indemnities") 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 Indemnities, 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. Scope of Contract**: This Contract, including attachment(s), specifies the contractual terms and conditions by which the Contractor shall provide Landfill Gas Services for South Region on an as-needed basis.
- 2. Term: This Contract shall be for a three (3) year term, effective October 1, 2022 through September 30, 2025, in an amount not to exceed \$15,000,000, with unused funds to be carried over from year to year, unless otherwise terminated as provided herein.
- **3. Renewable Annually with Concurrence:** This Contract may be renewed for one (1) additional twoyear term, by mutual written agreement of both Parties, in an amount not to exceed \$5,000,000 per year. The County does not have to give reason if it elects not to renew. Renewal periods may be subject to approval by the County of Orange Board of Supervisors.
- 4. Contractor Safety: Contractor shall comply with County's Safety and Loss Prevention Policy and Procedure #306 ("Contractor Safety Responsibilities") and submit a copy of its Injury and Illness Prevention Program (IIPP), and Contractor Safety-Activity Checklist to the County's Project Manager prior to the start of any work performed under this Contract. Contractor will notify County Project Manager of any revisions to the Safety-Activity Checklist and will provide a new Safety-Activity Checklist upon County request. The IIPP shall comply with California Code of Regulations, Title 8, Section 1509 or 3203 (whichever applies). Contractor shall submit other safety programs that pertain to the type of job that will be performed on site. County reserves the right to conduct inspections and audits as necessary for the purpose of evaluating any aspect of safety performance under this Contract.
- 5. Safety Data Sheets (SDS): Contractor is required to provide a Safety Data Sheet (SDS) compliant with California Code of Regulations, Title 8, Section 5194, for each hazardous substance that is provided, used or created as part of the goods or services provided by Contractor to County. The SDS for each substance must be sent to either the County Project Manager, as specified in the "Notices" provision of this Contract, or to the place of shipment or provision of goods/services.

- 6. **Precedence:** The Contract documents consist of this Contract and attachments. 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.
- 7. Authorization Warranty: The Contractor represents and warrants that the person executing this Contract on behalf of and for the Contractor is an authorized agent who has actual authority to bind the Contractor to each and every term, condition and obligation of this agreement and that all requirements of the Contractor have been fulfilled to provide such actual authority.
- 8. Usage: No guarantee is given by the County to the Contractor regarding usage of this Contract. Usage figures, if provided, are approximate, based upon past usage. The Contractor agrees to supply services requested, as needed by the County, at rates/prices listed in the Contract, regardless of quantity requested.
- **9. Compensation**: The Contractor agrees to accept the specified compensation as set forth in this Contract as full payment for performing all services and furnishing all staffing and materials required, for any reasonably unforeseen difficulties which may arise or be encountered in the execution of the services until acceptance, for risks connected with the services, and for performance by the Contractor of all its duties and obligations hereunder.
- Prevailing Wage (Labor Code §1773): Pursuant to the provisions of Section 1773 et seq. of the 10. California Labor Code, the Contractor shall comply with the general prevailing rates of per diem wages and the general prevailing rates for holiday and overtime wages in this locality for each craft, classification, or type of worker needed to execute this Contract. The rates are available from the Director of the Department of Industrial Relations at the following website: http://www.dir.ca.gov/dlsr/DPreWageDetermination.htm. The Contractor shall post a copy of such wage rates at the job site and shall pay the adopted prevailing wage rates. The Contractor shall comply with the provisions of Sections 1775 and 1813 of the Labor Code.
- 11. Amendments Changes/Extra Work: The Contractor shall make no changes to this Contract 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 or changes in laws or government regulations 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 (7) calendar days from the date the law or regulation went into effect or the date the change was proposed by the County and the Contractor was notified of the change. Such changes shall be agreed to in writing and incorporated into a Contract amendment. Said amendment shall be issued by the County assigned Deputy Purchasing Agent, shall require the mutual consent of all parties, and may be subject to approval by the County Board of Supervisors. Nothing herein shall prohibit the Contractor from proceeding with the work as set forth in this Contract.

- 12. Price Increase/Decrease: No price increases will be permitted during the first period of the price agreement. The County requires documented proof of cost increases on Contracts prior to any price adjustment. A minimum of 30-days advance notice in writing is required to secure such adjustment. No retroactive price adjustments will be considered. All price decreases will automatically be extended to the County of Orange. The County may enforce, negotiate, or cancel escalating price Contracts or take any other action it deems appropriate, as it sees fit. The net dollar amount of profit will remain firm during the period of the Contract. Adjustments increasing the Contractor's profit will not be allowed.
- **13. Contractor's Records**: The Contractor shall keep true and accurate accounts, records, books and data which shall correctly reflect the business transacted by the Contractor in accordance with generally accepted accounting principles. These records shall be stored in Orange County for a period of three

(3) years after final payment is received from the County. Storage of records in another county will require written approval from the County of Orange assigned Deputy Purchasing Agent.

- 14. 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 property 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.
- **15. 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, must be returned to the County at the end of this Contract.
- 16. Contractor Personnel: The Contractor warrants that all persons employed to provide service under this Contract have satisfactory past work records indicating their ability to adequately perform the work under this Contract. Contractor's employees assigned to this project must meet character standards as demonstrated by background investigation and reference checks, coordinated by the agency/department issuing this Contract.
- 17. Contractor Personnel Drug Free Workplace: The Contractor hereby certifies compliance with Government Code Section 8355 in matters relating to providing a drug-free workplace. The Contractor will:
 - 1. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations, as required by Government Code Section 8355(a)(1).
 - 2. Establish a drug-free awareness program as required by Government Code Section 8355(a)(2) to inform employees about all of the following:
 - a. The dangers of drug abuse in the workplace;
 - b. The organization's policy of maintaining a drug-free workplace;
 - c. Any available counseling, rehabilitation and employee assistance programs; and
 - d. Penalties that may be imposed upon employees for drug abuse violations.
 - 3. Provide as required by Government Code Section 8355(a)(3) that every employee who works under this Contract:
 - a. Will receive a copy of the company's drug-free policy statement; and
 - b. Will agree to abide by the terms of the company's statement as a condition of employment under this Contract.

Failure to comply with these requirements may result in suspension of payments under the Contract or termination of the Contract or both, and the Contractor may be ineligible for award of any future County contracts if the County determines that any of the following has occurred:

- 1. The Contractor has made false certification, or
- 2. The Contractor violates the certification by failing to carry out the requirements as noted above.

- **18. Conditions Affecting Work**: The Contractor shall be responsible for taking all steps reasonably necessary to ascertain 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.
- **19.** Equal Employment Opportunity: The Contractor shall comply with U.S. Executive Order 11246 entitled, "Equal Employment Opportunity" as amended by Executive Order 11375 and as supplemented in Department of Labor regulations (41 CFR, Part 60) and applicable state of California regulations as may now exist or be amended in the future. The Contractor shall not discriminate against any employee or applicant for employment on the basis of race, color, national origin, ancestry, religion, sex, marital status, political affiliation or physical or mental condition.

Regarding handicapped persons, the Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to provide equal opportunity to handicapped persons in employment or in advancement in employment or otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicaps in all employment practices such as the following: employment, upgrading, promotions, transfers, recruitments, advertising, layoffs, terminations, rate of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to comply with the provisions of Sections 503 and 504 of the Rehabilitation Act of 1973, as amended, pertaining to prohibition of discrimination against qualified handicapped persons in all programs and/or activities as detailed in regulations signed by the Secretary of the Department of Health and Human Services effective June 3, 1977, and found in the Federal Register, Volume 42, No. 68 dated May 4, 1977, as may now exist or be amended in the future.

Regarding Americans with disabilities, Contractor agrees to comply with applicable provisions of Title 1 of the Americans with Disabilities Act enacted in 1990 as may now exist or be amended in the future.

- **20. Americans with Disabilities Act (ADA)**: Section 504 of the Rehabilitation Act of 1973 as amended; Title VI and VII of the Civil Rights Act of 1964 as amended; Americans with Disabilities Act, 42 USC 12101; California Code of Regulations, Title 2, Title 22: California Government Code, Sections 11135, et seq; and other federal and state laws and executive orders prohibit discrimination. All programs, activities, employment opportunities, and services must be made available to all persons, including persons with disabilities.
- 21. Nondiscrimination Statement of Compliance: The Contractor's signature affixed hereon and dated shall constitute a certification under penalty of perjury under the laws of the state of California that the Contractor has, unless, exempted, complied with the nondiscrimination program requirements of Government Code Section 12900 (a-f) and Title 2, California Code of Regulations, Sections 11102 and 11103.

22. Disputes- Contract:

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 Deputy Purchasing Agent by way of the following process:

- 1. The Contractor shall submit to the agency/department assigned Deputy Purchasing Agent 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 Deputy 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. Nothing in this section shall be construed as affecting the County's right to terminate the Contract for cause or termination for convenience as stated in section K herein.

- **23. 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. Terminate the Contract immediately, pursuant to Section K herein;
 - **B.** Afford the Contractor written notice of the breach and ten (10) calendar days or such shorter time that may be specified in this Contract within which to cure the breach;
 - **C.** Discontinue payment to the Contactor for and during the period in which the Contractor is in breach; and
 - **D.** Offset against any monies billed by the Contractor but yet unpaid by the County those monies disallowed pursuant to the above.
- 24. Termination-Orderly: After receipt of a termination notice from the County of Orange, the Contractor may submit to the County a termination claim, if applicable. Such claim shall be submitted promptly, but in no event later than 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 combined with 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 performance of the Contract.
- **25. County's Project Manager**: The County Project Manager will act as liaison between the County and the Contractor during the term of this Contract. The County's Project Manager shall coordinate the activities of the County staff assigned to work with the Contractor.

The County's Project Manager shall have the right to require the removal and replacement of the Contractor's Project Manager and Contractor personnel from providing services to County under this Contract. The County's Project Manager shall notify the Contractor in writing of such action.

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The Contractor shall accomplish the removal within 3 calendar days after written notice by the County's Project Manager. The County's Project Manager shall review and approve the appointment of the replacement for the Contractor's Project Manager and Contractor personnel. Said approval shall not be unreasonably withheld.

- 26. Contractor's Project Manager: Contractor Project Manager will 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 the written consent of the County's Project Manager, which consent shall not be unreasonably withheld.
- 27. Contractor's Expense: The Contractor will be responsible for all costs related to photo copying, telephone communications, fax communications, and parking while on County sites during the performance of work and services under this Contract. The County will not provide free parking for any service in the County Civic Center.
- **28. 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 contacts, including graphic display information to be published in newspapers, magazines, etc., are to be administered only after County approval.
- **29. 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, 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 the 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.
- **30.** News/Information Release: The Contractor agrees that it will not issue any news releases or make any contact with the media in connection with either the award of this Contract or any subsequent amendment of, or effort under this Contract. Contractors must first obtain review and approval of said news media contact from the County through the County DPA. Any requests for interviews or information received by the media should be referred directly to the County. Contractors are not authorized to serve as a media spokesperson for County projects without first obtaining permission from the County.
- **31.** Notices: Any and all notices, request 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.

| Contractor | County |
|--|--|
| Name: Tetra Tech BAS, Inc. | Name: County of Orange, |
| | OC Waste & Recycling |
| Address: 21700 Copley Drive, Suite 200 | Address: 601 N. Ross St. 5 th Floor |
| Diamond Bar, CA 91765 | Santa Ana, CA 92701 |
| Attn: Sami Ayass | Attn: Kevin Oxford |
| Phone: 951-836-0025 | Phone: 949-728-3042 |
| Email: Sami.ayass@tetratech.com | Email: Kevin.oxford@ocwr.ocgov.com |
| | CC: Procurement |
| | Wendi Osborne |
| | Email: Wendi.osborne@ocwr.ocgov.com |
| | Phone: 714-834-2166 |
| | |

32. Subcontracting: No performance of this Contract or any portion thereof may be subcontracted by the Contractor without the express written consent of the County. Any attempt by the Contractor to subcontract any performance of this Contract without the express written consent of the County shall be invalid and shall constitute a breach of this Contract.

In the event that the Contractor is authorized by the County to subcontract, this Contract shall take precedence over the terms of the Contract between Contractor and subcontractor, and shall incorporate by reference the terms of this Contract. The County shall look to the Contractor for performance and indemnification and not deal directly with any subcontractor. All work performed by a subcontractor must meet the approval of the County of Orange.

33. Emergency/Declared Disaster Requirements: 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. All applicable invoices from the Contractor shall show both the emergency purchase order number and the Contract number.

[Signature Page Follows]

The Parties hereto have executed this Contract on the dates shown opposite their signatures as shown below.

TETRA TECH BAS, INC.*

| Christine Arbogast | Operating Unit President |
|----------------------------------|--------------------------|
| Print Name | Title |
| Christine Arbogast | 07/05/2022 |
| Signature | Date |
| Jeffrey M. Williams | CFO, Vice President |
| Print Name | Title |
| Jeffrey M. Williams Signature | 07/05/2022 |
| 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

Paul Albarian

By Paul Albarian, Senior Deputy

07/06/2022

Date

CONTRACT ATTACHMENT A SCOPE OF WORK

INTRODUCTION

South Region Landfill Operations of OC Waste & Recycling (OCWR) operates and manages daily activities at Prima Deshecha Landfill (Prima), which accepts and disposes of public, commercial and industrial non-hazardous waste. South Region Landfill Operations is also responsible to manage and oversee five former closed landfill sites.

The Prima Deshecha Landfill opened in 1976 to serve the non-hazardous solid waste disposal needs of Orange County. The landfill is permitted for 4,000 tons per day and currently receives approximately 1,700 tons of refuse per day. The current permitted active life of the landfill is through the year 2102. The site's fill area is divided into Zone 1 and Zone 4. Zone 1 is currently active and is equipped with a composite liner, landfill gas and condensate collection, a leachate collection, and sub-drain (groundwater) collection systems in Phases A through C. WMU-1 in Zone 1 and WMU-2 in Zone 4 are unlined.

The Prima Deshecha Landfill is located at 32250 Avenida La Pata in the City of San Juan Capistrano. The landfill is owned by the County of Orange and operated by OC Waste & Recycling. The site operating hours are from 7:00 AM to 5:00 PM, Monday through Saturday. Contractor may access the site before or after operating hours by coordinating with the South Region Landfill County PM or authorized designee.

South Region Landfill Operations also manages the post-closure maintenance activities at the closed Coyote Canyon Landfill (Coyote). The Coyote Canyon Landfill was a Class III municipal solid waste landfill located in the City of Newport Beach and operated by the County of Orange. In 1963, the County of Orange leased from The Irvine Company (TIC) approximately 670 acres of Coyote Canyon for disposal operations which commenced in August of 1963 and ended in March of 1990. The waste footprint of the Landfill occupied approximately 325 acres, and the landfill accepted approximately sixty (60) million cubic yards of household waste, commercial waste, industrial waste, and agricultural waste at approximately 6,000 tons per operating day. Closure for the landfill was officially recorded in the County Clerk-Recorder of Orange County on May 7, 2003.

On November 30, 2006, the Coyote Canyon Landfill and adjacent parcels (395 acres) were transferred from TIC to the County of Orange. As a result of the transfer of ownership, OCWR is responsible for the post-closure maintenance requirements of Title 27 CCR. Under the former Refuse Gas Lease and Agreement assigned by TIC to the County of Orange, Coyote Canyon Energy (CCE) operated and maintained the landfill gas control system and gas-to-energy conversion plant at the Landfill. On December 31, 2015 the Refuse Gas Lease and Agreement expired and OCWR assumed ownership, operation, and maintenance of the landfill gas collection and control system (LFGCCS), the flare station and appurtenant monitoring systems. The operation and maintenance of the LFGCCS consists of 436 active wells and 622 active monitoring probes. The flare station consists of two blowers and four flares.

In addition to the Prima Deshecha and Coyote Canyon Landfills, work may be performed at any or all of the following closed sites: Del Obispo, Forster Canyon, Lane Road, and San Joaquin Landfills.

BACKGROUND

The South Coast Air Quality Management District (SCAQMD) Rule 1150.1 stipulates that all landfills which accepted waste on or after January 1, 1982 shall install and operate a landfill gas collection and control system (LFGCCS) to control landfill gas surface emissions and subsurface migration. In addition, periodic testing shall be performed to evaluate the effectiveness of the LFGCCS and to verify that the landfill is in compliance with the Rule 1150.1 surface emission limits. SCAQMD Rule 431.1 requires the monitoring of sulfur compounds in gaseous fuels combusted during industrial activities. Alternative Rule 431.1 monitoring plans for the Prima Deshecha and Coyote Canyon Landfills have been approved by the SCAQMD.

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

Contractor shall perform the County's SCAQMD-required Rules 1150.1 and 431.1 monitoring, 27CCR-required onsite structures and perimeter probe monitoring and reporting, and the operations, maintenance and monitoring of the LFGCCS at the Prima Deshecha, Coyote Canyon, Lane Road and San Joaquin Landfills in accordance with this Scope of Work.

The following documents are available for reference at the Prima Deshecha landfill operations office:

- Permits to Construct/Operate the LFG Flare Stations/Blower Facilities, Condensate Collection and Storage Systems, and Collection Wells and Associated Piping
- SCAQMD Rule 1150.1 Compliance Plans for Prima Deshecha, Coyote Canyon, Lane Road and San Joaquin landfills
- Coyote Canyon Landfill Post Closure Maintenance Plan April 2018
- Lane Road Landfill Long-Term Monitoring and Operational Plan 2010
- San Joaquin Landfill Long-Term Monitoring and Operational Plan 2014

GENERAL

Operations and maintenance of LFGCCS, SCAQMD Rule 1150.1and 431.1 sampling and monitoring programs for Prima, Coyote, Lane Road and San Joaquin Landfills.

The Scope of Work includes all fieldwork necessary to continue operations as needed and perform operation, maintenance and monitoring (OM&M) of the LFGCCS as stated in this Scope of Work.

Contractor shall be familiar with the SCAQMD, Subpart WWW of 40 Code of Federal Regulations (CFR) 60, and 27CCR rules and regulations as they relate to landfills. Additionally, Contractor shall become intimately familiar with the existing LFGCCS components at each of the landfills and shall work well with OC Waste and Recycling and regulators to minimize conflicts.

SCOPE OF WORK

The Scope of Work for this Contract includes the following major areas of service required for the successful completion of this Contract and to achieve continued compliance with all applicable regulatory requirements:

- Routine OM&M of the LFGCCS
- SCAQMD Rule 1150.1 and Rule 431.1 monitoring, reporting, and laboratory analyses
- Non-routine OM&M of the LFGCCS
- Coordination with site operators
- Site specific health and safety plan

Project administration requirements

Contractor shall assign at least one pre-approved lead field technician to perform routine OM&M as needed at the Prima, Coyote, Lane Road and San Joaquin 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 work order and submit it to the County for approval prior to start of work.

OC Waste & Recycling may have signed agreements with private developers to build and operate facilities at Prima to utilize landfill gas at a cost provided for in a separate agreement. In these cases, the private developer may operate the LFGCC systems and condensate system maintenance at Prima, but SCAQMD Rule 1150.1 monitoring, maintenance, modification, upgrades, expansions to the LFGCCS may be performed through this Contract. Similar agreements may be entered by the County for the closed disposal sites for the duration of this Contract.

A. ROUTINE OPERATION, MAINTENANCE, & MONITORING (OM&M)

Contractor shall facilitate operation of the systems within regulatory guidelines, while maintaining the composition of the LFG at a level to support continuous operation of the flares, where present, and the LFGCCS, and to meet OC Waste & Recycling requirements. Contractor shall 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 27CCR, 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. More frequent monitoring, shall be subject to OC Waste & Recycling direction and approval, and shall be directed by the County PM by issuance of a non-routine OM&M task order. Routine OM&M shall be accomplished by performing the following services:

A.1 REGULAR OPERATIONS, MAINTENANCE, & MONITORING

Contractor shall operate, perform maintenance, and repair service of the LFGCCS, appurtenance components, and monitoring systems in accordance with the manufacturer's recommendations (oil changes, filter replacements and any other services required). The labor portion shall be performed under the routine and the material and parts shall be provided under the non-routine portion of the Contract. If during, the course of performing routine OM&M activities, the Contractor finds equipment or portions of the LFGES in need of repairs that fall outside the scope of the routine OM&M portion of the Contract, the Contractor shall prepare a non-routine work proposal describing the necessary repairs and the estimated cost to perform the services for review and written approval by the County PM. The cost to complete the approved work shall be paid under the non-routine OM&M portion of the Contract.

A.1.1 Prima Deshecha Landfill

Daily OM&M

Flares and Blower Station and liquid conveyance systems

The flares (2) and blowers (3) station shall be monitored daily. Monitoring includes the liquid conveyance systems, blowers, flares and compressors. 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 must be recorded daily in a format acceptable to OC Waste & Recycling, including but not limited to:

- Daily condensate sump inspection and transfer of condensate to holding tank.
- Daily Station Readings: Flare inlet LFG composition, flare temperature, LFG inlet flow, flow totalizer, condensate meter from field, condensate tank level.
- As needed, respond to flare(s) shutdown autodialed call-outs during non-daylight hours and weekends within 4 hours of the call-out. All emergency responses will be completed under non-routine work orders.

Weekly OM&M

Flare and Blower Station

Monitoring includes the liquid conveyance systems, compressors, air injection, gas treatment systems, and condensate wastewater treatment system. 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 must be recorded on a weekly basis in a format acceptable to OC Waste & Recycling, including but not limited to:

- Date, time, name, and signature of monitoring technician;
- Monitoring instrument ID and daily calibration log for the instrument;
- LFGCCS Operating hours/day (i.e., 24hr/day, 7am-lpm, etc.). Startup, Shutdown, and Malfunction (SSM) Report;
- Meteorological conditions (e.g., barometric pressure, ambient temperature, wind speed and direction, etc.);
- Weekly inspection and monitoring of the flare station (all appurtenant components, check propane tank levels).
- Weekly condensate treatment and batch discharge to sewer: treatment with bleach and may include sodium hydroxide or caustic soda.
- Weekly check condensate pump stations for proper operation.
- Respond to auto-dialer call-outs from condensate pump stations during working hours and during the following workday on weekends.
- Blower Inlet and Outlet: LFG temperatures, static pressures, differential pressures, flow rates: LFG concentrations of methane, oxygen, carbon dioxide and carbon monoxide;
- Knockout Vessel inlet and outlet static pressures and calculated pressure drop across the demister pad;
- Operating flare(s) inlet LFG concentrations of methane, oxygen, carbon dioxide, hydrogen sulfide and carbon monoxide: LFG temperature, piolet tube measurement, static pressure, and inside diameter of pipe where these measurements were taken (for back-up flow rate calculations);
- Operating flare(s) operating temperature and operation 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 (where applicable);
- Approximate amount of condensate in the flare station condensate holding tank(s);
- Flame arrestor inlet and outlet static pressures and calculated pressure drop;
- Operating air compressor(s), blowers(s) flare(s) ID;
- Compliance thermocouple selected location (i.e. top, middle, bottom, etc;
- Condensate quantity generation in gallons per day;
- Liquid levels, oil levels, filters;

- Valve position and status;
- Activated carbon spent

Required format will be provided by the County.

LFG condensate storage tanks shall be monitored weekly or more frequently as necessary to provide time to the County PM to schedule transport and disposal. The County will provide condensate transport and disposal.

Monthly OM&M

Flare and Blower Station

The flare and blower station shall be monitored monthly:

- Monthly H2S Treatment system
- Monthly wet bulb dry bulb temperature readings.
- Monthly condensate pump station maintenance (Change filters, check call outs)
- Monthly air injection blower inspection
- Monthly Download flare station's digital recorder data
- Monthly site inspection by Project Manager
- Monthly Blackhawk Pump Inspection Lubrication
- Monthly Flare Station Safety Shutdown Testing
- Monthly structure indoor monitoring of control building at the flare station per Title 27.
- Monthly 15-minute exercise of the standby generator and record in the on-site log; notify OCWR of standby generator hours run and need to refuel following each use in standby service.
- Monthly Blower Station Component Leak Test
- Monthly LFG centrifugal blower and motor lubrication.
- Monthly Prepare and submit OM&M Report to OCWR
- Monthly Develop and maintain current spare parts list.
- Monthly Make small repairs to collection and treatment system
- Monthly Web Base Data Management Application (Data Upload)
- Monthly Budget tracking and cost reporting

Monthly OM&M Wellfield

All existing and future LFG extraction wells and the collection piping shall be monitored once per month at the Prima Deshecha Landfill site. The following data shall be collected and recorded in a format acceptable to OC Waste & Recycling, including but not limited to:

- Date, time, name, and signature of monitoring technician;
- Monitoring instrument ID and daily calibration log for the instrument
- Meteorological conditions (e.g., barometric pressure, ambient temperature, wind speed and direction, etc.);
- All headers shall be inspected for proper grading and alignment. Headers shall be regraded to acceptable gradient.
- LFG temperature;
- Wellhead static pressure;
- Header static pressure;
- Methane gas concentration;
- Oxygen gas concentration;
- Carbon dioxide gas concentration;
- LFG flow rate for each well and valve position;

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- Differential pressure;
- Sumps operation and maintenance; liquid levels; leaks; filters, etc.;
- Sample ports located at strategic points in the gas conveyance header system shall be tested for the same parameters listed above; and

All data must be transferred to and stored in a computer database (database software license fee to be paid by contractor), and analyzed for long term trends (i.e., pressure drops indicating blockage, subsurface combustion, reduced flow rates indicating possible decrease in LFG generation, etc.) and made available to OCWR's Project Manager and Engineering Team.

Required format will be provided by the County.

A.1.1.1 Prima Landfill (Ouarterly)

Quarterly Operations and Monitoring Flare and Blower Station

- Quarterly Flare Station Inspection (flame arrestor, instrumentation, mechanical flare components, blower inspection, UV scanner operation, H2S Treatment).
- Quarterly Instantaneous Penetration Monitoring per new federal rules (EG Subpart OOO & NESHAP AAAA)

Wellfield

• Quarterly exercise all valves within the LFG system and perform regular maintenance

A.1.1.2 Prima Landfill (Semi-annual)

Semi-Annual Operations and Monitoring Report

• Preparation of the Semi-Annual Title V Report.

A.1.1.3 Prima Landfill (Annual)

Annual Operations and Monitoring

Flare and Blower Station

- Flare thermal couple replacement, assume twelve (12) thermal couples, six (6) per flare.
- Blower Inspection (Inspect foundation and couplings)
- Annual H2S Treatment Media exchange and tank inspection.
- Check flare station piping alignment.
- Flare flow meter calibration (Fluid Components International (FCI) infield calibration and report preparation). Assume one (1) flow meter.
- Flare Inspection (Inspect linkage, wiring, spark plug, barrel, foundation, pilot nozzle)
- Annual Title V Report and Certification to SCAQMD
- Perform flare evaluation and tuning before the Source Test

A.1.2 Coyote Canyon Landfill

Daily OM&M

Flare and Blower Station and liquid conveyance systems

The flare and blower station shall be monitored daily. Monitoring includes the liquid conveyance systems, blowers, flares and compressor. 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 must be recorded on a daily basis in a format acceptable to OC Waste & Recycling, including but not limited to:

- Daily condensate sump inspection and transfer of condensate to holding tank.
- Daily Station Readings: Flare inlet LFG composition, flare temperature, LFG inlet flow, flow totalizer, condensate meter from field, condensate tank level.
- As needed, respond to flare shutdown autodialed call-outs during non-daylight hours and weekends within 4 hours of the call-out. All emergency responses will be completed under non-routine work orders.

Weekly OM&M

Flare and Blower Station

Monitoring includes the liquid conveyance systems, compressors, air injection, gas treatment systems, and condensate waste water treatment system. 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 must be recorded on a weekly basis in a format acceptable to OC Waste & Recycling, including but not limited to:

- Date, time, name, and signature of monitoring technician;
- Monitoring instrument ID and daily calibration log for the instrument;
- LFGCCS Operating hours/day (i.e. 24hr/day, 7am-lpm, etc.). Startup, Shutdown, and Malfunction (SSM) Report;
- Meteorological conditions (e.g., barometric pressure, ambient temperature, wind speed and direction, etc.);
- Weekly inspection and monitoring of the flare station (all appurtenant components, check propane tank levels).
- Weekly condensate treatment and batch discharge to sewer: treatment with bleach and may include sodium hydroxide or caustic soda. Prepare used chemical treatment summary table.
- Weekly check North and POGO condensate pump stations for proper operation.
- Respond to auto-dialer call-outs from condensate pump stations during working hours and during the following workday on weekends.

Monthly OM&M - Flare and Blower Station

The flare and blower station shall be monitored monthly:

- Monthly wet bulb dry bulb temperature readings;
- Monthly condensate pump station maintenance (Change filters, check call outs);
- Monthly air injection blower inspection;
- Monthly Download flare station's digital recorder data;
- Monthly site inspection by Project Manager;
- Monthly Blackhawk Pump Inspection Lubrication;
- Monthly Flare Station Safety Shutdown Testing;
- Monthly structure indoor monitoring of control building at the flare station per Title 27;
- Monthly 15 minute exercise of the standby generator and record in the on-site log; notify OCWR of standby generator hours run and need to refuel following each use in standby service;
- Monthly LFG centrifugal blower and motor lubrication;
- Monthly Prepare and submit OM&M Report to OCWR;
- Monthly Develop and maintain current spare parts list;
- Monthly Make small repairs to collection and treatment system;
- Monthly Web Base Data Management Application (Data Upload); and
- Monthly Budget tracking and cost reporting.
- Monthly Plugged gas probes analysis table

Monthly OM&M - Wellfield

Four hundred and thirty six (436) LFG extraction wells and the collection piping shall be monitored once per month at the Coyote Canyon Landfill site. The following data shall be collected and recorded in a format acceptable to OC Waste & Recycling, including but not limited to:

- Date, time, name, and signature of monitoring technician;
- Monitoring instrument ID and daily calibration log for the instrument
- Meteorological conditions (e.g., barometric pressure, ambient temperature, wind speed and direction, etc.);
- All headers shall be inspected for proper grading and alignment. Headers shall be re-graded to acceptable gradient;
- LFG temperature;
- Wellhead static pressure;
- Header static pressure;
- Methane gas concentration;
- Oxygen gas concentration;
- Carbon dioxide gas concentration;
- LFG flow rate for each well and valve position;
- Differential pressure;
- Sumps operation and maintenance; liquid levels; leaks; filters, etc.; and
- Sample ports located at strategic points in the gas conveyance header system shall be tested for the same parameters listed above.

All data must be transferred to and stored in a computer data base (data base software license fee to be paid by contractor), analyzed for long term trends (i.e., pressure drops indicating blockage, subsurface combustion, reduced flow rates indicating possible decrease in LFG generation, etc.) and made available to County PM.

Required format will be provided by the County.

A.1.2.1 Coyote Canyon Landfill (Quarterly)

Quarterly Operations and Monitoring

Flare and Blower Station

- Quarterly Flare Station Inspection (flame arrestor, instrumentation, mechanical flare components, blower inspection, UV scanner operation).
- Quarterly Instantaneous Penetration Monitoring per federal rules (EG Subpart OOO & NESHAP AAAA)

A.1.2.2 Coyote Canyon Landfill (Semi-annual)

Semi-Annual Operations and Monitoring Report

• Preparation of the Semi-Annual Title V Report.

A.1.2.3 Coyote Canyon Landfill (Annual)

Annual Operations and Monitoring

Flare and Blower Station

- Flare thermal couple replacement, assume eight (8) thermal couples, two (2) per flare;
- Blower Inspection (Inspect foundation and couplings);
- Check flare station piping alignment;
- Flare flow meter calibration (Fluid Components International (FCI) infield calibration and report preparation). Assume four (4) flow meters;
- Flare Inspection (Inspect linkage, wiring, spark plug, barrel, foundation, pilot nozzle); and
- Annual Title V Report and Certification to SCAQMD.

A.1.3 Lane Road and San Joaquin Landfills

Weekly OM&M

Blower Station

The blower station shall be monitored weekly. Monitoring includes the liquid conveyance systems, compressors, and gas treatment systems. 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 must be recorded on a weekly basis in a format acceptable to OC Waste & Recycling, including but not limited to:

- Date, time, name, and signature of monitoring technician;
- Monitoring instrument ID and daily calibration log for the instrument;
- LFGCCS Operating hours/day (i.e. 24hr/day, 7am-lpm, etc.). Startup, Shutdown, and Malfunction (SSM) Report;
- Meteorological conditions (e.g., barometric pressure, ambient temperature, wind speed and direction, etc.);
- Inlet and Outlet: LFG temperatures, static pressures, differential pressures, flow rates;
- LFG concentrations of methane, oxygen, carbon dioxide and carbon monoxide;
- Liquid levels, oil levels, filters;
- Valve position and status; and
- Activated carbon spent; TOC outlet readings.

• LFG Condensate tank pH treatment with Sodium Hydroxoide prior to disposal.LFG Condensate tank pH treatment with Sodium Hydroxide prior to disposal. LFG condensate storage tanks shall be monitored weekly or more frequently as necessary to provide time to the County PM to schedule transport and disposal. The County will provide condensate transport and disposal.

Monthly OM&M

<u>Wellfield</u>

LFG extraction wells and the collection piping shall be monitored once per month at the Lane Road and San Joaquin sites. The following data shall be collected and recorded in a format acceptable to OC Waste & Recycling, including but not limited to:

- Date, time, name, and signature of monitoring technician;
- Monitoring instrument ID and daily calibration log for the instrument;
- Meteorological conditions (e.g., barometric pressure, ambient temperature, wind speed and direction, etc.);
- All headers shall be inspected for proper grading and alignment. Headers shall be re-graded to acceptable gradient;

- LFG temperature;
- Wellhead static pressure;
- Header static pressure;
- Methane gas concentration;
- Oxygen gas concentration;
- Carbon dioxide gas concentration;
- LFG flow rate for each well and valve position;
- Differential pressure;
- Sumps operation and maintenance; liquid levels; leaks; filters, etc.; and
- Sample ports located at strategic points in the gas conveyance header system shall be tested for the same parameters listed above.

All data must be transferred to and stored in a computer data base, and analyzed for long term trends (i.e., pressure drops indicating blockage, subsurface combustion, reduced flow rates indicating possible decrease in LFG generation, etc.) and made available to County PM.

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 must 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 LFGCCS system, etc.), these services will be performed under the non-routine portion of the project.

Required format will be provided by the County.

A.2 SCAQMD RULE 1150.1 AND RULE 431.1 MONITORING AND REPORTING

For Prima Deshecha, Coyote, Lane Road and San Joaquin Landfills:

All work under the 1150.1 monitoring program shall be performed in accordance with the site specific *Compliance Plans* prepared per the April 1, 2011 amended SCAQMD Rule 1150.1 for the Prima Deshecha, Coyote, Lane Road and San Joaquin Landfills.

Contractor shall provide all equipment necessary for the completion of these tasks including, but not limited to, portable flame ionization detectors, Tedlar bag sampling apparatus, ambient air samplers, and full time wind speed and direction stations. In compliance with each site's Rule 1150.1 compliance plan (summarized in Rate Sheet Part I), Contractor shall perform the following tasks for the duration of this Contract:

A.2.1 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 Total Organic Compounds (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 *County of Orange MA-299-22011111 ePFF:2191001 Page* 25 of 66

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 flags, identifying the areas in need of remediation. Instantaneous monitoring exceedances from 200 to 499 ppmv shall also be marked with flags that distinguish them from the 500 ppmv exceedances. Locations of 200 to 499 ppmv, and 500 ppmv and above, shall be recorded in northing and easting coordinates. The coordinates shall be obtained using a GPS unit.

To initiate remediation, Contractor shall notify the County PM of exceedance areas within 24 hours of identification. In addition, a notification letter shall be sent to the County PM.

A.2.2 Integrated Surface Monitoring, Sampling and Analysis

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 shall be collected from each of the established sampling grids during each sampling event. Each integrated surface sample shall 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. Required format will be provided by the County.

To initiate remediation, Contractor shall notify the County PM of exceedance areas within 24 hours of identification. In addition, a notification letter shall be sent to the County PM.

Contractor shall coordinate with the County PM or authorized designee to enact remediation measures. At the Coyote Canyon, Lane Road, and San Joaquin Landfills Contractor shall be responsible for remediation measures related to the operation of the LFGCCS, 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, 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. In accordance with the Guidelines, if an exceedance still exists after two remediation attempts, Contractor shall make recommendations of LFGCCS modifications to the County, to bring the landfill into compliance with the applicable regulatory requirements.

As a means of tracking remediation of exceedance areas, Instantaneous Surface Monitoring (ISM) Data Sheets shall be filled out and distributed to appropriate personnel. Contractor shall notify the County PM, in writing, of any outstanding exceedances within 24 hours of detection.

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 OC Waste & Recycling contracted 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)

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. Chain of Custody form shall be provided to County PM within 24 hours of delivery/pick up.

A.2.3 Ambient Air Sampling Analysis

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 shall 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. Siting of ambient air sampler locations shall 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 OC Waste & Recycling contracted analytical laboratory and analyzed within 72 hours of sampling for the following compounds:

- Fixed gases (i.e., methane, carbon dioxide, oxygen, and nitrogen)
- TGNMO
- Core Group TAC (listed in Table 1)

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. Chain of Custody form shall be provided to County PM within 24 hours of delivery/pick up.

A.2.4 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 1.0-liter Tedlar bag (enclosed in a light-sealed box) over a 10-minute period.

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

Chain of Custody form shall be provided to County PM within 24 hours of delivery/pick up.

A.2.5 Perimeter Probe Monitoring, Sampling and Analysis

Perimeter probe sampling, including field procedures and equipment, shall be conducted in accordance with the *Guidelines* and the approved *Compliance Plan* for each landfill. Please note that each monitoring probe port may contain multiple monitoring probes at varying depths. Estimated monitoring probe quantity in Rate Sheet - Part I represents the total number of monitoring probe ports in each individual site.

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 1.0-liter Tedlar bag housed within a light-sealed box over a continuous 10-minute period utilizing a non-contaminating pump. The sample shall then be analyzed using the portable FID.

Probe Monitoring

Landfill gas migration probes shall be monitored once a month. The following data shall be collected and recorded to comply with SCAQMD Rule 1150.1 monitoring and 27 CCR in a format acceptable to OC Waste & Recycling, including but not limited to the following.

- Date, time, name, and signature of monitoring technician;
- Monitoring instrument ID and daily calibration log for the instrument;
- Meteorological conditions (e.g., barometric pressure, ambient temperature, wind speed and direction, etc.);
- Static pressure;
- Purge volumes and time;
- Methane gas concentration;
- Oxygen gas concentration; and
- Carbon dioxide gas concentration

Required format will be provided by the County.

Probe Sampling

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

- Fixed gases (i.e., methane, carbon dioxide, oxygen, and nitrogen)
- TGNMO
- Core Group 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 OC Waste & Recycling contracted analytical laboratory and analyzed within 72 hours of sampling for the following compounds:

- Fixed gases (i.e., methane, carbon dioxide, oxygen, and nitrogen)
- TGNMO
- Core Group 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 shall be performed at the same interval as probe monitoring. Chain of Custody form shall be provided to County PM within 24 hours of delivery/pick up.

A.2.6 Rule 431.1 Sulfur Monitoring and Sampling (Prima and Coyote Canyon Only)

Hydrogen Sulfide monitoring and sampling, including field procedures and equipment, shall be conducted in accordance with the Rule 431.1 Alternative Monitoring Plan.

Hydrogen Sulfide (as Total Sulfur) samples for monitoring and analysis shall be collected from the main LFG header line entering the blower/flare station. A LFG sample must be collected in a 1.0-liter Tedlar bag (enclosed in a light-sealed box) over a 10-minute period.

Hydrogen Sulfide shall be analyzed via colorimetric tubes on a monthly basis. Three sets of readings shall be taken for each monitoring event and average. Colorimetric tubes shall be recordable on a parts per million (ppm) basis. Required format for documentation will be provided by the County.

Sampling for Hydrogen Sulfide shall be performed on a quarterly basis via SCAQMD Method 307-91. These samples shall be delivered to an approved OC Waste & Recycling contracted analytical laboratory and analyzed within 72 hours of sampling.

Chain of Custody form shall be provided to County PM within 24 hours of delivery/pick up.

A.2.7 Blower Station Component Leak Test

Component leak test including field procedures and equipment shall be conducted in accordance with the approved *Compliance Plan* for each landfill.

Each flanges and connections within each blower station shall be monitored using a portable flame ionization detector (FID), which meets *Guideline* specifications. Any component under positive pressure that exceeds 500 ppm TOC measured as methane shall be recorded. The recorded exceedance on the component leak test shall be notified to Site Engineer within 24 hours of identification to initiate remediation. Required format will be provided by the County.

A.3 MAINTENANCE

Regular maintenance of all LFGCCS equipment at Prima, Coyote Canyon, Lane Road, and San Joaquin Landfills is an integral part of this routine OM&M program. Contractor shall understand and implement all equipment manufacturers recommended regular periodic maintenance tasks.

The OC Waste & Recycling reserves the right to add or delete tasks to the maintenance schedules as equipment is added or deleted, or at OC Waste & Recycling's discretion.

Each Contract year, Contractor shall provide OC Waste & Recycling with an inventory and list of required and needed spare parts for each of the sites.

- Contractor shall service compressors located at the relevant Landfills per the manufacturer's recommendations (Oil changes, filter replacements and any other service required).
- If, in the course of performing routine OM&M activities, Contractor finds equipment or portions of the LFGCCS in need of repairs that fall outside the scope of the routine OM&M portion of the contract, Contractor shall prepare non-routine work proposals, describing the necessary repairs and the estimated cost to perform them, for review and approval by County PM. The cost to complete the work shall be paid under the non-routine OM&M portion of the Contract.

A.4 **REPORTING**

Any exceedances, 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.

Draft gas well readings (Field Data Sheets) shall be sent to the County, in Excel format, within five (5) working days after the readings are completed for the month, and in no case shall submittal be later than the 5th of the month following readings.

One hard copy and one electronic copy shall be submitted to the County Engineer by the 30th of the following month. The County reserves the right to change the report format and deliverables. No additional cost shall be billed to the County for any format changes.

A.5 MEETING

Once per month, Contractor's key staff members shall formally meet with County's personnel at the County's offices to discuss the Contract's status. <u>Good communication between Contractor, the regulators, and OC Waste & Recycling staff is critical to the success of this Contract.</u>

NON-ROUTINE OPERATIONS, MAINTENANCE, AND MONITORING SCOPE OF WORK

B.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, repair of damaged conveyance piping, relocation and upsizing of main header, subheaders, associated lateral, and vacuum lines 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 County PM or authorized designee. The following list presents the type of activities, but is not an exhausted list of expected to be non-routine occurrences:

- Thermocouple replacement;
- Flow meter installation, repair, replacement;
- Blower replacement and parts:
- UV scanner replacement;

- Flare refractory repair or replacement;
- Flare Coating repair;
- Flare burner repair or replacement;
- Air Compressor equipment installation and repairs;
- Well head replacement;
- Well valve replacement;
- Well extension, abandonment and capping;
- Condensate tanks installation and removal;
- Sump installation, maintenance, and replacement;
- Replacement of Flex Hose(s);
- Well service removal and re-installation;
- Header installation, relocation, upsize, removal and re-installation;
- Condensate lines installation, repair, and removal;
- Vacuum lines installation and abandonment;
- Knockout vessel demister pad cleaning;
- Equipment removal, installation and replacement;
- Probe installation and abandonment;
- Programmable Logic Controller installation, repair, and replacement;
- Electrical Wiring and telemetry associated with the LFGCCS;
- Electrical Generators due to loss of power;
- Source Testing;
- Landfill Liquids Disposal; and
- Design plans for cost estimating and construction.

B.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:

- Call out by the automatic dialing system;
- Repair of landfill gas and condensate system piping breaks or separations causing the emergency shutdown of the LFGCCS;
- Repair or replacement of extraction wells;
- Repair or replacement of probes;
- Odor complaints;
- Flare station shut-down events;
- 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. OC Waste & Recycling does not require Contractor to respond to auto dialer call-outs in the non-daylight hours due to the unsafe nature of the landfills. However, Contractor shall respond first thing the following morning. LFGCCS professionals shall be intimately involved in mitigating system malfunctions and directing emergency call-out situations. Emergency events shall be coordinated through the County PM or authorized designee in an effort to expedite necessary corrective measures. Work orders shall 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 PM or authorized designee.

B.3 ANNUAL SOURCE TESTING AND REPORTING (UPON COUNTY REQUEST) (Prima Deshecha and Coyote Canyon Landfills 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 Work Order.

Flare stack emissions source testing shall be performed every 4,000 operating hours or on an annual basis at the Prima Deshecha and Coyote Canyon Landfills. At Coyote, flare stacks shall be source tested as needed for continuous operations during 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.

B.4 TASK ORDERS

As-needed, non-routine service calls may be placed against this Contract by the OC Waste & Recycling Project Manager. Each activity under this Contract shall be covered by a task order. It is expressly understood that the tasks (service calls) to which the Contractor is asked to respond to, shall be on an "as-needed" basis, and authorized by the County PM. As each task is identified, the Contractor shall prepare a "Task Order" proposal which details the Scope of Work to be accomplished, list of deliverables, schedule for completion, and a not-to-exceed cost for its completion. Each task order shall be reviewed and approved by the County PM prior to commencement of the proposed work. These services may be paid on a time and materials basis <u>or</u> lump sum basis as mutually agreed by County PM and Contractor. County PM written authorization shall be submitted with the invoice in order for payment to be made.

B.5 Time & Materials Basis

For payment on a Time & Materials basis Task Order all costs on each invoice shall be separate and itemized with reference to the scope of services and the task order number, as provided in the Contract and the Task Order authorization. Invoice documentation shall be attached to the invoice and be sufficient to substantiate the actual cost of all billed items. The submitted billed items shall be in conformance with the requirements in the Contract and all County policies.

B.5.1 Lump Sum Basis

Lump sum basis task orders shall have written approval by the County PM prior to the Contractor proceeding with the services. Prior to the services commencing the Contractor shall provide the County PM with a detailed breakdown of the labor and materials costs that determined their lump sum quote. The breakdown shall be in accordance with the Contract rate sheets. Costs not contained in the Contract rate sheets shall be reviewed by the County PM for reasonableness as part of the written approval process. All lump sum quotes for task orders shall be executed and processed as described herein.

In the event of unforeseen circumstances occurring necessitating a modification to the authorized lump sum task order, a separate task order authorization or an amendment to the existing task order shall 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 County PM a billing invoice for services rendered. The County PM shall review and approve the invoice for payment in accordance with Attachment C, Cost/Compensation for Contractor Services.

The Contractor shall at all times 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 the Contract.

Contractor shall start work within ten calendar days of authorization or within a timeframe as authorized by the County PM.

TIME IS OF THE ESSENCE TO THIS CONTRACT. THE CONTRACTOR SHALL COMPLETE THE TASK ORDER NO LATER THAN THE TIME SPECIFIED IN EACH TASK ORDER FOLLOWING THE ISSUANCE OF THE NOTICE TO PROCEED (NTP).

COORDINATION WITH LANDFILL OPERATORS' FIELD STAFF

Contractor shall coordinate with landfill operator's field staff through the Project Manager since the Prima Deshecha Landfill will continue to receive refuse. 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, Contractor shall cooperate with all other contractors performing activities at the landfill sites.

SITE SPECIFIC HEALTH AND SAFETY PLAN

Contractor shall provide a site-specific health and safety plan for each of the landfill sites in accordance with Article 26, Health and Safety Plan. The health and safety plans shall be submitted to the County within seven (7) days of the Contract award date and shall address issues and concerns facing personnel performing routine OM&M, non-routine OM&M, Rule 1150.1 monitoring, and Rule 431.1 monitoring activities. At a minimum the following subjects shall be covered:

- Injury and illness prevention
- Respiratory protection program
- OSHA and SCAQMD excavation standards
- Identification of health and safety hazards
- Drilling operations
- Hot work and welding
- Handling LFG and LFG condensate
- Confined space entry

PROJECT ADMINISTRATION

Contractor shall provide the County PM or authorized designee a cell phone contact number or equivalent for field communications with Contractors 24 hours per day. Contractor shall have a Project Manager to conduct all administrative services required under the Scope of Work and to be accessible to the county personnel. This person shall be paid under the routine Scope of Work but shall be responsible for the coordination of the entire project Scope of Work (preparation of non-routine work orders, site visits, coordination of field personnel and subcontractors, etc.), and the project administration task shall include overall project administration services such as project scheduling, tracking, budgeting, invoicing, and meetings.

Monthly invoices shall be prepared and submitted to the County by the 20th day of the each month. The County shall provide Contractor with the required format for invoicing.

- Work performed under the Routine OM&M portion of this Contract for Prima Deshecha, Coyote, Lane Road, and San Joaquin Landfill. Contractor shall submit the invoice for the completed work performed during that month. (Routine work may, at the request of the Contactor and as approved by the Project Manager, be billed separately).
- Work performed under the Non-Routine OM&M portion of this Contract for the Prima Deshecha, Coyote, Lane Road, and San Joaquin Landfills shall be considered "fixed fee" and a breakdown of costs shall be presented prior to approval of work orders by the County PM. The invoice shall include an itemized breakdown of all approved work order tasks performed.

This breakdown shall include:

- Work order number;
- Percent (%) completion of each work order;
- Amount previously invoiced for the work order; and
- The amount invoiced to date for each work order; and remaining funds available on each work order.

CONTRACTOR REQUIREMENTS

1. Contractor shall furnish all management, labor, supplies, materials, tools, equipment, utilities, sanitary units, permits, working drawings, 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.

All of said work shall be performed and materials to be furnished shall be in strict accordance with typical drawing and specifications provided by site engineer, Monitoring Grid for Rule 1150.1 Compliance Plans or as specified by County PM. Contractor shall visit the site, verify measurements, and 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 County PM any error, inconsistency, or omission that Contractor may discover.

2. Contractor and Contractor's Project Manager shall 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 of experience in the installation all aspects of LFG collection systems.

The Contractor reserves the right to, 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 hiring and replacement of these individuals or subcontractors.

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 authorized Project Manager and the County PM, unless otherwise specified herein.

3. Contractor and its employees (including subcontractors) shall check in and check out with the site operations receptionist every time they enter and leave the site. A daily maintenance or construction log shall be developed to record the following: 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 County PM or authorized designee before proceeding.

Contractor shall bring to the attention of County PM or authorized 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 all work under this Contract 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. All debris generated on site shall be disposed of at the Prima Deshecha or Frank R. Bowerman Landfills 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 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 County 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 and maintain **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 County PM. The foreman, senior technician, and technician shall each have a minimum of five (5) years of experience in the monitoring and maintenance of landfill gas collection systems and shall 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 County 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 County PM.

A Contractor Project Manager, 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. All personnel to be assigned to perform the services in accordance with this Contract shall have at least three years of experience. Contractor shall provide complete resumes of each person to be assigned to all work under this Contract 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 shall have the "40-hour training" as required by OSHA 29 CFR 1910.120 and shall 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 shall 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.
- 12. Contractor shall have the ability to respond to any emergency situation within the response requirements for the emergency visits portion of the Scope of Work.

The Contractor shall have a Project Manager to conduct all administrative service required under the Scope of Work and to be accessible to the County personnel. The Contractor Project Manager shall be paid under the routine Scope of Work, and shall be responsible for the coordination of the entire Contract 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 the Prima Deshecha, Coyote Canyon, Lane Road and San Joaquin Sanitary 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 work order and submit it to the County for approval prior to start of work.

Note that the following safety gear is <u>required</u> to be worn on all sites: steel-toe boots, hardhat and safety vest.
GENERAL CONDITIONS

A. Site Conditions

- 1. <u>Existing Site Conditions</u>: Information regarding the site of the work given in drawings or specifications has been obtained by County's representatives and is believed to be reasonably correct, but County does not warrant either the completeness or accuracy of such information, and it is the responsibility of Contractor to verify all such information.
- 2. <u>Changed Conditions:</u> Contractor shall promptly, and before such conditions are disturbed, notify the County PM in writing of:
 - (a) Subsurface or latent physical conditions at the site differing materially from those indicated in this Contract, or
 - (b) Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract.
 - (c) In the event that a dispute arises between County and Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or the time required for performance of any part of the work, Contractor shall not be excused from any scheduled completion date provided for by the contract, but shall proceed with all work to be performed under the Contract. Contractor shall retain any and all rights provided either by the Contract or by law, which pertain to the resolution of disputes and protests between the contracting parties.

OC Waste & Recycling shall promptly investigate the conditions, and if County, as a result, finds that such conditions do so materially differ and cause an increase or decrease in Contractor's cost of, or the time required for, performance of this Contract, County may choose to (a) terminate the Contract for the convenience of County in accordance with Paragraph 24 (Termination - Convenience of the County); or (b) issue a written change to the Contract in accordance with Paragraph 9 (Modifications - Changes/Extra Work). Any claim of Contractor for adjustment hereunder shall not be allowed unless Contractor has given notice as above required.

- 3. Public Utility Facilities on Project Site: Pursuant to Government Code Section 4215, Contractor shall be compensated for the costs of locating and repairing damage not due to failure of Contractor to exercise reasonable care, and removing or relocating main or trunk line utility facilities located on the Contract construction site and not identified in the plans or specifications with reasonable accuracy. Such compensation shall also cover the cost of Contractor's equipment necessarily idled during such work. This provision shall not be deemed to require compensation when the presence of existing service laterals or appurtenances can be inferred from the presence of visible facilities such as buildings, meters, and junction boxes on or adjacent to the construction site. If Contractor discovers such unidentified utility facilities during construction, Contractor shall immediately notify the County PM and the utility in writing.
- 4. <u>Space at Site</u>: Contractor shall be allowed reasonable space at the site of the work as available and access thereto and shall confine Contractor's operations to the space assigned. The work shall be performed without interference with the ordinary use of landfill operations and maintenance. Contractor shall cooperate with other Contractors of County and shall not commit or permit any act that will interfere with the performance of work by any other Contractor or employees of County whether at the site or not.
- 5. <u>Site Investigation and Representation</u>: Contractor acknowledges satisfaction as to the nature and location of the work; the general and local conditions, particularly those bearing upon availability of transportation, access to the site; disposal, handling and storage of materials, availability of labor,

water, electric power, telephone, roads, and uncertainties of weather, or physical conditions at the site; the conformation and conditions of the ground; the character of equipment and facilities needed preliminary to and during the prosecution of the work; and all matters that can in any way affect the work or the cost thereof under this Contract.

Contractor further acknowledges satisfaction as to character, quality, and quantity of surface and subsurface materials to be encountered from Contractor's inspection of the site and from reviewing any available records of exploratory work furnished by County or included in these Contract Documents. Failure by Contractor to become acquainted with the physical conditions of the site and all the available information shall not relieve Contractor from responsibility for properly estimating the difficulty or cost of successfully performing the work.

Contractor warrants that as a result of examination and investigation of all the aforesaid data, Contractor can perform the work in a good and workmanlike manner and to the satisfaction of County. County assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of this Contract, unless (1) such representations are expressly stated in the Contract, and (2) the Contract expressly provides that the responsibility therefore is assumed by County.

6. Information on Site Conditions:

- (a) General: Any information obtained by the County PM regarding site conditions, subsurface information, groundwater elevations, existing construction of site facilities as applicable, and similar data shall be available for inspection at the office of the County PM upon request. Such information is offered as supplementary information only and not part of the Contract Documents.
- (b) Topographic Maps: Topographic maps were used in the project design. Contractors may inspect such maps upon request to the County PM, or may obtain copies upon payment of the cost to reproduce the copies.
- 7. <u>Subsurface Investigation:</u> When test holes, if any, have been excavated to indicate subsurface materials at particular locations, neither County nor the County PM, assume any responsibility whatever in respect to the sufficiency or accuracy of borings made, or of the log of test borings, or of other investigations, or of the interpretations made thereof, and there is no warranty or guarantee, either expressed or implied, that the conditions indicated by such investigations are representative of those existing throughout such area, or any part thereof, or that unforeseen developments may not occur. A log of test borings, if any, showing a record of the data obtained on subsurface conditions may be examined upon request to the County PM. Contractor may make arrangements with County for permission to conduct such additional subsurface investigation as may be necessary to verify existing conditions. Contractor shall examine the site and may make arrangements with County to conduct Contractor's own subsurface investigation.
- 8. <u>Conditions Affecting Work</u>: Contractor shall be responsible for having taken steps reasonably necessary to ascertain the nature and location of the work and the general and local conditions that can affect the work or the cost thereof. Any failure by Contractor to do so shall not relieve Contractor from responsibility for successfully performing the work without additional expense to County. County assumes no responsibility for any understanding or representations concerning conditions made by any of its officers or agents prior to the execution of this Contract, unless such understanding or representations by County are expressly stated in the Contract.

B. Beneficial Occupancy

- 1. County may, at any time, and from time to time, during the performance of the work, enter the work area for the purpose of performing any necessary work by County labor or other contracts, and for any other purpose in connection with the expansion of facilities. In doing so, County shall endeavor not to interfere with Contractor, and Contractor shall not interfere with other work being done by or on behalf of County.
- 2. County reserves the right to take possession of and utilize all or part of any work area, facilities, or appurtenances thereto prior to completion and final acceptance of all the work. If County elects to exercise this right, Contractor shall be relieved of liability for loss or damage to completed portions of the work area, facilities, or appurtenances thereto other than that loss or damage caused by Contractor's operations or negligence. Such taking of possession by County shall not relieve Contractor from any other provisions of this Contract and shall not constitute a final acceptance of any such work.

C. Procedures

Before starting work, Contractor shall examine all adjoining work and report to the County PM any such work not correctly located or constructed, and shall not proceed with Contractor's work until notified to proceed by County. Contractor's commencement of the work of Contractor's trade shall be interpreted as Contractor's acceptance of work over which or on which Contractor's work must be placed or installed.

D. Tests

Where herein specified or when, in the opinion of the County PM or County, tests of any work or materials, including soils tests, are required, such tests shall be made by a licensed testing agency or laboratory approved by County at Contractor's expense. In addition, should such tests indicate noncompliance with the specifications, all retesting to prove subsequent compliance shall be paid for by Contractor. Contractor shall coordinate testing and make arrangements for the testing and inform the County PM with written notice at least 24 hours in advance of any needed testing.

E. Coordination

- 1. Location of pipes, County equipment, and other project work components, unless fixed by dimension or module, are intended to be approximate to the extent that they may be reasonably changed as required, or as directed by County, to suit job conditions. Contractor shall be responsible for the coordination of all trades so that all components are properly integrated into the project work. All significant conflicts in location shall be brought promptly to the attention of County.
- 2. Contractor shall cooperate in the coordination of its separate activities in a manner that shall provide the least interference with the County's current landfill operation and the activities of other Contractors working in the area.

F. Storage and Working Space

The working area, as designated by County, may be utilized by Contractor for material storage and working space. Any additional space shall be obtained by Contractor at Contractor's own expense. There are several locations within the landfill for Contractor to store Contractor's equipment. These locations shall be designated by the County PM.

G. Storage and Protection of Products

Contractor shall:

- 1. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible, and store sensitive products in weather-tight, climate-controlled enclosures.
- 2. For exterior storage of fabricated products, place on sloped supports above ground.
- 3. Cover products subject to deterioration with impervious sheet covering with ventilation to avoid condensation.
- 4. Provide equipment and personnel to store products by methods to prevent disfigurement or damage.
- 5. Arrange storage of products to permit access for inspections; and periodically inspect to assure products are undamaged and are maintained under specified conditions.

H. Inspection Requirements

6. <u>Inspection Requirements:</u> Materials to be used in the work shall be subject to inspection and tests by County or its designated representative. Contractor shall furnish without charge such samples as may be required. Contractor shall furnish the County and the Engineer a list of Contractor's sources of materials and the locations at which such materials shall be available for inspection.

The list shall be furnished to County and the Engineer in sufficient time to permit inspecting and testing of materials to be furnished from such listed sources in advance of their delivery to the appropriate landfill site and their use. The Engineer may inspect, sample, or test materials at the source of supply or other locations, but such inspection, sampling, or testing shall not be undertaken until County is assured by Contractor of the cooperation and assistance of both Contractor and the supplier of the material.

Contractor shall ensure that the County PM or the Engineer has free access at all times to the material to be inspected, sampled, or tested. It is understood that such inspections and tests, if made at any point other than the point of incorporation in the work, in no way shall be considered as a guarantee of acceptance of such material, nor of continued acceptance of material presumed to be similar to that upon which inspections and tests have been made, and that inspection and testing performed by County shall not relieve Contractor or Contractor's suppliers of responsibility for quality control. Contractor shall provide safety measures as necessary to protect the County or Engineer personnel making field tests from project work activities.

Manufacturers' warranties, guarantees, instruction sheets, and parts lists, which are furnished with certain articles of materials incorporated in the work, shall be delivered to the County PM before work. Reports and records of inspections made and tests performed, when available at the site of the work, may be examined by Contractor.

- 7. <u>Plant Inspection:</u> County or its designated representative may inspect the production of material, or the manufacture of products at the source of supply. Plant inspection, however, shall not be undertaken until County is assured of the cooperation and assistance of both Contractor and the material producer. County or its authorized representative shall have free entry at all times to such parts of the plant as concerns the manufacture or production of the materials. Adequate facilities shall be furnished free of charge to make the necessary inspection. County assumes no obligation to inspect materials at the source of supply.
- 8. <u>Certificate of Compliance:</u> A Certificate of Compliance shall be furnished on request prior to the use of any materials listed in this Contract or as requested in non-routine work. In addition, when approved

by County PM or Engineer, County may permit the use of certain materials or assemblies prior to sampling and testing accompanied by a Certificate of Compliance. The certificate shall be signed by the manufacturer of the material or the manufacturer of assembled materials and shall state that the materials involved comply in all respects with the requirements of the specifications. A Certificate of Compliance shall be furnished with each lot of material delivered to the work, and the lot so certified shall be clearly identified in the certificate.

All materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The fact that material is used on the basis of a Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating material in the work that conforms to the requirements of the plans and specifications, and any such material not conforming to such requirements shall be subject to rejection whether or not in place.

County reserves the right to refuse to permit the use of material on the basis of a Certificate of Compliance. The form of the Certificate of Compliance and its disposition shall be as directed by County.

I. Substitution

Where the specifications or drawings specify any material, product, thing, or service by one or more brand names, whether or not "or equal" is added, and Contractor requests to propose the use of another item as being equal, Contractor shall request prior approval from County PM or Engineer.

J. Trenching/Excavation

To comply with Labor Code 6705, for the excavation of any trench or trenches five feet or more in depth, the following clause shall be carried out: submission by the Contractor and acceptance by the awarding body or by a registered civil or structural engineer, employed by the awarding body, to whom authority to accept has been delegated, in advance of excavation, of a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer.

Nothing in this section shall be deemed to allow the use of a shoring, sloping, or protective system less effective than that required by the project work Safety Orders.

Nothing in this section shall be construed to impose tort liability on the awarding body or any of its employees.

To comply with regulatory agency requirements, for trenches or other excavations that extend deeper than four feet below the surface, the following clauses shall be carried out:

- (1) The Contractor shall promptly, and before the following conditions are disturbed, notify the public entity, in writing, of any:
 - (a) Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code that is required to be removed to a Class I, Class 11, 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.
 - (c) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.
- (2) The public entity shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve 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 shall issue a modification under the procedures described in the contract. That, in the event that a dispute arises between the public entity and the Contractor whether the conditions materially differ or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the contract, but shall proceed with all work to be performed under the contract. The Contractor shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

K. Traffic Control

Traffic at the site by Contractor and County shall be coordinated with County. If necessary, within 10 days after the task authorization is issued, Contractor shall submit a Traffic Control Plan for review and acceptance by County. Vehicles used at the job site shall not exceed 15 mph, and reckless driving shall not be tolerated. Violations of this clause may result in the suspension or dismissal of the operator of the vehicle. All motor-driven equipment using fuel shall have spark arresters.

The Site Operations and Traffic Control Plan shall address, at a minimum, the following:

- Protection of existing improvements
- Access to work areas
- Timing of project work activities in the existing access road

ATTACHMENT 1 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. CONTRACTOR SAFETY

Contractor shall conduct all operations and perform all services in a safe manner. Contractor shall implement and maintain all proper health and safety precautions to protect its employees, subcontractors, County staff, the public, and the environment. Contractor shall conform to the OC Waste & Recycling Code of Safe Practices (Appendix II), the County of Orange Safety and Loss Prevention Program #306 and CAL/OSHA standards (Appendix I-A), as well as all other applicable laws, codes and regulations.

Contractor shall submit a detailed Health and Safety Plan (H&SP) including Contractor's Injury and Illness Prevention Program (IIPP). *Reference Appendices I-A and I-B*. Contractor's IIPP shall meet the minimum requirements of California Code of Regulation (CCR), Title 8, Section 1509 and 3203 and maintain compliance with all local, municipal, state and federal safety and health laws, orders, and regulations applicable to Contractor operations in performance of this Scope of Work. At a minimum, the H&SP must comply with the minimum site-specific standards as set by OCWR. *Reference Appendix II*.

Appendix I-A. County's Safety and Loss Prevention Policy and Procedure #306. signed. Appendix I-B. Contractor Safety Activity Checklist. completed. and Proposer's H&SP including the IIPP shall be submitted within 7 calendar days of receipt of the Notice of Intent to Award to the DPA, Wendi Osborne at wendi.osborne@ocwr.ocgov.com. The H&SP will be approved by OCWR's Safety Culture Manager PRIOR to any Contractor staff entering County owned or operated landfills and other facilities.

B. 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.

C. 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 OCWR or designee; and
- Any other agency permits pertinent to the Project.

D. 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.

E. 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.

F. 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 OCWR 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 OCWR, as stated within Section M of this Attachment, Maintenance Facility and Work Area.

G. 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%.

H. STORMPROTECTION

- 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. As part of its storm protection, the Contractor shall provide a storm water management plan (erosion control plan), to be reviewed and approved by the County. (Reference Section H of this Attachment, NPDES Storm Water Discharges.)

I. 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. The Contractor shall submit a Storm Water Management Plan in compliance with NPDES Regulations and site specific SWPPP. OCWR will notify the Contractor of any non-compliance with the foregoing stipulations, and appropriate actions shall be taken promptly. The Contractor shall also notify OCWR 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 or control.

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.

J. 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; or
 - c. 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.

K. CONTRACTOR GENERATED HAZARDOUS WASTE

The Contractor is responsible for the proper and lawful handling, storage, transportation, 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 OCWR 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 legal and regulatory requirements. The Plan shall also include emergency notification to County staff and emergency personnel.

The spill-damaged area(s) must be restored/repaired to 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, or other evidence of transfer or disposal 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 its 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 appropriate emergency response equipment and materials available in the working area.

L. FUGITIVE DUST EMISSION CONTROL

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

The Contractor shall submit a Dust Control Plan to be received and approved by the County. If the Contractor fails or refuses to correct the noncompliance immediately, OCWR may terminate the Contractor's right to proceed with the work, by written notice to the Contractor. In such event, OCWR 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 OCWR 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.

OCWR'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.

M. BIOLOGICAL AND HABITAT PROTECTION

OCWR 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.

N. 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 OCWR. 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 and orderly. 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 OCWR. 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 and orderly 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 OCWR'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 OCWR prior to shipment. If the manifest is not submitted, OCWR 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, OCWR will remove, process, transport, and certify the material as stated above and all costs incurred by OCWR 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 OCWR or enforcement agency personnel.

O. 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.

EXHIBIT A-1 COUNTY SUPPLIED ITEMS & RESOURCES

Contractor requires the following resources and/or County assistance to be provided by the County:

- Soil material for backfill and construction of berms and other system features.
- Current topography and survey information for use in potential design and construction 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 Contractor site(s).
- Constructed drill pads (if required) to allow for safe drill rig access and set-up for projects requiring well and probe systems enhancements at the project sites.

ATTACHMENT B

COST PROPOSAL, RATES, PAYMENT TERMS AND INVOICING INSTRUCTIONS

GENERAL

This is a fixed ceiling, time and materials contract between the County and the Contractor for Landfill Gas Services for South Region as provided in Contract 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 Contract Attachment A, Scope of Work, of this Contract. Contractor shall provide a cost breakdown of each identifiable task/deliverables specified in their response to Contract Attachment A, Scope of Work. *The Proposer is to state any assumptions used in establishing the total project cost quoted herein*.

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 C of this Contract. The Contractor shall fully perform and complete its duties and obligations under this Contract, regardless of the number of man-hours required of the Contractor in effectuating such performance and completion. Labor hours and other costs incurred to complete the services and materials as set forth in this Contract, which exceed the total project cost, shall be borne by the Contractor.

The Contractor shall notify the County Project Manager or authorized designee in writing when expenditures against the Contract reach 75% of the total dollar limit of the Contract. County will not be responsible for any expenditure overruns and will not pay for work exceeding the total dollar limit of the Contract unless an amendment to cover those costs has been issued by the County. This notification must come within 3 working days of receipt of invoice that is within the notification limit.

All extra work resulting in an increase in the Contract total project cost must be authorized by written modification to this Contract. Said modification shall be issued by the Deputy Purchasing Agent and may be subject to approval by the County Board of Supervisors.

TIME AND MATERIALS

Labor Requirements: The hourly and/or per call rate(s) quoted in proposal, shall include direct and indirect labor charges, truck, fuel, all necessary equipment, tools, overhead, travel, other expenses, and all profit applicable to services identified by Contractor. All necessary equipment to include, but not limited to:

- Handheld electronic instruments that are typically used in the landfill gas industry, such as the Landtec Gem gas analyzer, photo ionization detector (PID), Flame ionization detector (FID), and calibration supplies including sample tubing, Tedlar bags for calibration and calibration gas.
- Hand tools (wrenches, screwdrivers, shovels, etc.)
- Pipe taps of various sizes
- Cordless and electric tools and generators (drills, saws, impact driver, etc.)

Overtime will <u>not</u> be paid on non-emergency response requests, unless specifically authorized by the County's Site Project Manager 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 time and materials work. The Contractor must obtain prior written approval from County's Site 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.

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

Material Costs: When approved by the County's Site Project Manager or designee, all parts and materials purchased by the Contractor or by its subcontractor, shall be reimbursed at actual cost plus 10 % mark up. All parts shall be F.O.B Destination. All applicable taxes on materials will be applied after the mark-up has been added; no additional cost or mark-up will be applied to the sales tax amount. The Contractor is to provide with every invoice, a copy of the supplier's invoice for any part or material costing \$100.00 or more. Contractor shall not be reimbursed for any administrative charges in procuring material.

The above markup is not allowed for the line items listed in the Rate Sheets, Part 2.

Materials shall be billed at Contractor's Actual Cost Plus <u>10%</u>. The markup may be applied only to the actual cost of the parts or materials, excluding tax.

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, if longer) after completion of repairs, if applicable.

Equipment Rental: When approved by the County's Site Project Manager or designee, miscellaneous types of equipment may be rented by the Contractor or by its subcontractor and shall be reimbursed at actual cost plus <u>10%</u> mark up.

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 service, maintenance, and preventive maintenance.

TERMS

Contractor shall submit an invoice in *arrears* for Services provided as outlined in Contract Attachment A, Scope of Work.

Payment due to the Contractor will be made within 45 days after receipt of a correctly submitted invoice. The Contractor shall reimburse the County of Orange for any monies paid to the Contractor for services not provided.

Payment made by the County shall not preclude the right of the County from thereafter disputing any service billed or involved under this Contract and shall not be construed as acceptance of any part of the work (services).

INVOICING INSTRUCTIONS

The responsibility for providing an acceptable invoice to the County for payment rests with the Contractor. The Contractor shall provide an invoice on the Contractor's letterhead. The invoice shall have a unique number and shall include the following information:

- a. County Contract #MA-299-22011111
- b. Task or Sub Task Number (if available)
- c. Copy of pre-approved task order quote (signed by Site Project Manager)
- d. Detailed description of tasks/services and deliverables
- e. Name of site and address where services where rendered
- f. Date of service
- g. Cost per hour (for labor, including back-up documentation, unless lump sum basis)
- h. Material costs (including any back-up documentation, as required, unless lump sum basis)
- i. Subcontractor costs (if applicable)
- j. Equipment costs (if applicable)
- k. Total Invoice 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 <u>each</u> invoice will be <u>separate</u> 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.

Invoices and supporting documents shall be submitted to <u>ocwrinvoice@ocwr.ocgov.com</u> or mailed to the following address:

OC Waste & Recycling Attn: Accounts Payable 601 N. Ross St. 5th Floor Santa Ana, CA 92701

Payment (Electronic Funds Transfer EFT): The County of Orange offers contractors 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. To request a form, please contact the department's procurement representative. Completed form and required documentation must be submitted by mail to the physical address listed on the EFT form. Forms submitted electronically will not be accepted.

RATE SHEET - PART I

ROUTINE MONTHLY OPERATION, MAINTENANCE, AND MONITORING

| | (TASK A | () | | | |
|-------------|--|------------|--|------------------|--------------|
| Task No. | Description | Unit | Estimated No. of Units Per year | Cost per Unit | Annual Cost |
| TASK A | .1 ROUTINE OM&M | | | | |
| A.1.1 | Prima Deshecha | Month | 12 | \$37,295.00 | \$447,540.00 |
| A.1.1.1 | Prima Deshecha | Quarter | 4 | \$8,482.50 | \$33,930.00 |
| A.1.1.2 | Prima Deshecha | Each | 2 | \$2,457.54 | \$4,915.09 |
| A.1.1.3 | Prima Deshecha | Each | 1 | \$37,561.50 | \$37,561.50 |
| A.1.2 | Coyote Canyon | Month | 12 | \$73.392.46 | \$880,709.55 |
| A.1.2.1 | Coyote Canyon (Quarterly) | Quarter | 4 | \$2,199.66 | \$8,798.64 |
| A.1.2.2 | Coyote Canyon (Semi-Annual) | Each | 2 | \$2,457.54 | \$4,915.09 |
| A.1.2.3 | Coyote Canyon (Annual) | Each | 1 | \$23,764.39 | \$23,764.39 |
| A.1.3 | Lane Road | Month | 12 | \$9,966.40 | \$119,596.83 |
| A.1.3 | San Joaquin ¹ | Month | 12 | \$8,333.05 | \$99,996.58 |
| TASK A | .2 SCAQMD RULE 1150.1 AND RULE 431.1 MONITO | RING AND | REPORTING | | I |
| | (A) Prima Deshecha | | | | |
| A.2.1 | 1. Instantaneous Surface Monitoring | Grid | 211 × 4 | \$30.50 | \$25,740.32 |
| A.2.2 | Integrated Surface Monitoring, Sampling and Analysis | Grid | 211 × 4 | \$37.92 | \$32,002.48 |
| A.2.3 | 3. Ambient Air Sampling and Analysis | Quarter | 4×4 | \$440.78 | \$7,052.55 |
| A.2.4 | 4. Raw LFG Sampling and Analysis | Quarter | 1 × 4 | \$870.36 | \$3,481.43 |
| A.2.5 | 5. Perimeter Probe Monitoring, Sampling, and Analysis | Port | 136 × 12 | \$39.04 | \$63,718.40 |
| A.2.6 | 6. Rule 431.1 Sulfur Monitoring and Sampling | Month | 12 | \$535.90 | \$6,430.74 |
| A.2.7 | 7. Instantaneous Penetration Monitoring | Grid | 210 x 4 | \$19.80 | \$16,632.00 |
| | (B) Coyote Canyon | | | | |
| A.2.1 | 1. Instantaneous Surface Monitoring | Grid | 266×2 | \$30.01 | \$15,963.34 |
| A.2.2 | 2. Integrated Surface Monitoring, Sampling and | Grid | 266 × 2 | \$38.02 | \$20,224.50 |
| A.2.3 | Analysis 3. Ambient Air Sampling and Analysis | Quarter | 4×4 | \$440.78 | \$7,052.55 |
| A.2.4 | 4. Raw LFG Sampling and Analysis | Quarter | 4 | \$870.36 | \$3,481.43 |
| A.2.5 | 5. Perimeter Probe Monitoring, Sampling, and Analysis | Port | 622 × 12 | \$33.08 | \$246,885.58 |
| A.2.6 | 6. Rule 431.1 Sulfur Monitoring and Sampling | Month | 12 | \$515.13 | \$6,181.60 |
| A.2.7 | 7. Blower Station Component Leak Test | Quarter | 4 | \$719.01 | \$2,876.06 |

| A.2.8 | 8. Instantaneous Penetration Monitoring | Grid | 266 x 4 | \$19.80 | \$21,067.20 |
|-----------------------|--|---------------------------------|--------------------------------|-----------------|--------------|
| | (C) Lane Road | 1 | | | |
| A.2.1 | 1. Instantaneous Surface Monitoring | Grid | 111×2 | \$34.11 | \$7,573.52 |
| A.2.2 | 2. Integrated Surface Monitoring, Sampling and Analysis | Grid | 111×2 | \$42.27 | \$9,383.20 |
| A.2.4 | 3. Raw LFG Sampling and Analysis | Semi- Annual | 2 | \$962.15 | \$1,924.29 |
| A.2.5 | 4. Perimeter Probe Monitoring, Sampling, and Analysis | Port | 77 × 12 | \$45.58 | \$42,113.74 |
| A.2.7 | 5. Blower Station Component Leak Test | Quarter | 4 | \$569.31 | \$2,277.24 |
| | (D) San Joaquin | 1 | | | |
| A.2.1 | 1. Instantaneous Surface Monitoring | Grid | 29×2 | \$51.46 | \$2,984.48 |
| A.2.2 | 2. Integrated Surface Monitoring, Sampling and Analysis | Grid | 29×2 | \$62.02 | \$3,597.34 |
| A.2.4 | 3. Raw LFG Sampling and Analysis | Semi- Annual | 2×2 | \$481.07 | \$1,924.29 |
| A.2.5 | 4. Perimeter Probe Monitoring, Sampling, and Analysis | Port | 17 × 12 | \$47.71 | \$9,732.53 |
| A.2.7 | 5. Blower Station Component Leak Test | Quarter | 4 | \$569.31 | \$2,277.24 |
| TASK A | A.3, A.4, A.5 MAINTENANCE, REPORTING, AND | MEETING | S | | |
| | Maintenance, Reporting, and Meetings | Month | 12 | \$33,191.54 | \$398,298.50 |
| certain l the exte | Condensate moisture separators shall be monitored on a levels, the condensate shall be pumped out and collected nt of 15 man hours per month of a field technician). An sation shall require pre-approval from County PM prior | l in the conder y additional | ensate tank at work that ma | no additional o | costs (up to |

RATE SHEET - PART II NON-ROUTINE MAINTENANCE SERVICES - 3 YEAR RATES

| | (TASK B) | | |
|------|--|------|------------------------|
| Item | Description | Unit | Unit Cost ³ |
| | Mobilization/Demobilization ¹ | | |
| 1. | Mobilization/Demobilization expenditures for all preparatory work and operations, including but not limited to, bond and insurance costs; those costs deemed necessary for the movement of personnel, supplies, and incidentals to the project sites; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site as well as the related demobilization costs anticipated at the completion of the project. (Horizontal Wells). | Each | \$6,000.00 |
| 2. | Mobilization/Demobilization includes expenditures for all preparatory work and operations, including but not limited to, bond and insurance costs; those costs deemed necessary for the movement of personnel, supplies, and incidentals to the project sites; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site as well as the related demobilization costs anticipated at the completion of the project. (Vertical Wells). | Each | \$9,500.00 |
| | Horizontal Wells Installation and Abandonment ² | | |
| 3. | Furnish and install 6" perforated and solid Horizontal HDPE LFG Collectors (2' x 4'trench), No. 2 gravel, 8 oz. geotextile, detection marker, refuse hauling, and backfill. | LF | \$69.00 |
| 4. | Cut and Cap 6'' solid Horizontal HDPE LFG Collectors. Note : The line item cost does not include a backhoe and operator. This cost includes wellhead removal and salvage, fuse HDPE cap on the well, and butt fuse cap on lateral pipe requiring the use of a fusion machine, and generator. If the task requires the well casing to be buried below grade, a backhoe and operator will be needed to expose the well casing 2 to 3 feet below grade and to backfill at completion. The cost to complete such task will be \$ 750.00 . | EA | \$415.00 |
| 5. | Furnish and install 8" perforated and solid Horizontal HDPE LFG Collectors (2' x 4'trench), No. 2 gravel, 8 oz. geotextile, detection marker, refuse, hauling, and backfill. | LF | \$75.75 |

| 6. | Cut and Cap 8" solid Horizontal HDPE LFG Collectors. Note : The line item cost does not include a backhoe and operator. This cost includes wellhead removal and salvage, fuse HDPE cap on the well, | | |
|-----|--|----|----------|
| | and butt fuse cap on lateral pipe requiring the use of a fusion machine, and generator. If the task requires the well casing to be buried below grade, a backhoe and operator will be needed to expose the well casing 2 to 3 feet below grade and to backfill at completion. The cost to complete such task will be \$_750.00 | EA | \$420.00 |
| | Vertical Wells Installation and Abandonment ² | | |
| 7. | Furnish and install 4'' perforated and solid Vertical HDPE LFG Collectors (up to 24'' borehole), No. 2 gravel, bottom cap (0 to 100 ft), refuse hauling. | LF | \$123.00 |
| 8. | Furnish and install 4'' perforated and solid Vertical HDPE LFG Collectors (up to 24'' borehole), No. 2 gravel, bottom cap (>100 ft), refuse hauling. | LF | \$133.00 |
| 9. | Extend 4" solid Vertical HDPE LFG Collectors. | LF | \$52.00 |
| 10. | Cut and Cap 4'' solid Vertical HDPE LFG Collectors. Note : The line item cost does not include a backhoe and operator. This cost includes wellhead removal and salvage, fuse HDPE cap on the well, and butt fuse cap on lateral pipe requiring the use of a fusion machine, and generator. If the task requires the well casing to be buried below grade, a backhoe and operator will be needed to expose the well casing 2 to 3 feet below grade and to backfill at completion. The cost to complete such task will be \$ 750.00 | EA | \$220.00 |
| 11. | Furnish and install 6'' perforated and solid Vertical HDPE LFG Collectors (up to 24'' borehole), No. 2 gravel, bottom cap (0 to 100 ft), refuse hauling. | LF | \$138.00 |
| 12. | Furnish and install 6'' perforated and solid Vertical HDPE LFG Collectors (up to 24'' borehole), No. 2 gravel, bottom cap (>100 ft), refuse hauling. | LF | \$148.00 |
| 13. | Extend 6'' solid Vertical HDPE LFG Collectors. | LF | \$60.00 |
| 14. | Cut and Cap 6'' solid Vertical HDPE LFG Collectors. Note : The line item cost does not include a backhoe and operator. This cost includes wellhead removal and salvage, fuse HDPE cap on the well, and butt fuse cap on lateral pipe requiring the use of a fusion machine, and generator. If the task requires the well casing to be buried below grade, a backhoe and operator will be needed to expose the well casing 2 to 3 feet below grade and to backfill at completion. The cost to complete such task will be \$750.00 | EA | \$455.00 |
| 15. | Furnish and install 8'' perforated and solid Vertical HDPE LFG Collectors (up to 24'' borehole), No. 2 gravel, bottom cap (0 to 100 ft), refuse hauling. | LF | \$147.00 |

| 16. | Furnish and install 8'' perforated and solid Vertical HDPE LFG Collectors (up to 24'' borehole), No. 2 gravel, bottom cap (>100 ft), refuse hauling. | LF | \$157.00 |
|-------------------|---|----|------------|
| 17. | Extend 8'' solid Vertical HDPE LFG Collectors. | LF | \$76.00 |
| 18. | Cut and Cap 8" solid Vertical HDPE LFG Collectors. Note : The line item cost does not include a backhoe and operator. This cost includes wellhead removal and salvage, fuse HDPE cap on the well, and butt fuse cap on lateral pipe requiring the use of a fusion machine, and generator. If the task requires the well casing to be buried low grade, a backhoe and operator will be needed to expose the well casing 2 to 3 feet below grade and to backfill at completion. The cost to complete such task will be \$ 750.00 . | EA | \$700.00 |
| | Condensate Drain Lines Installation | | |
| 19. | Furnish and install 2" HDPE Condensate line above ground | LF | \$6.77 |
| 20. | Furnish and install 2" HDPE Condensate line below ground (Up to 3' below ground surface) | LF | \$22.77 |
| 21. | Furnish and install 2" x 4" double contained HDPE Condensate line above ground | LF | \$24.00 |
| 22. | Furnish and install 2" x 4" double contained HDPE Condensate line below ground (Up to 3' below ground surface) | LF | \$34.00 |
| 23. | Furnish and install 4" HDPE Condensate line above ground | LF | \$18.72 |
| 24. | Furnish and install 4" HDPE Condensate line below ground (Up to 3' below ground surface) | LF | \$27.72 |
| 25. | Furnish and install 4" x 8" double contained HDPE Condensate line above ground | LF | \$45.50 |
| 26. | Furnish and install 4" x 8" double contained HDPE Condensate line below ground (Up to 3' below ground surface) | LF | \$61.50 |
| | Sampling and Monitoring | | |
| 27. | Instantaneous Surface Re-Monitoring (Per Hotspot) | EA | \$33.24 |
| 28. | Perimeter Probe Re-Monitoring (Per Port) | EA | \$32.00 |
| 29. | Rule 431.1 Sulfur Monitoring and Sampling Re-Monitoring (Per Event) | EA | \$196.00 |
| mobiliz Note 2 | For projects that involve both vertical and horizontal well installation, only zation/demobilization rate allowed unless authorized by County PM. For materials (i.e. HDPE Pipe) supplied by County, a material credit shall be county a material credit shall be county. | | the County |
| Note 3 profess | the unit price listed in this rate sheet. It Unit cost includes but not limited to labor, equipment, overhead, supervision ional and administrative services; but does not include direct freight charges rsed at cost with supporting invoice. | | |

| | (TASK B) | | | |
|------|---|----------|---|--|
| Item | Description | Unit | Material Cost Per Unit ² | Installation Cost Includes Labor and Equipment ³ |
| | PIPE MATERIALS (HDPE Unless Other | wise Not | ed) | |
| | 24" Pipe | | | - |
| 101 | 24" Solid SDR 17 Buried 4' max. to Top of pipe | LF | \$147.50 | \$56.00 |
| 102 | 24" Solid SDR 17 Above ground | LF | \$147.50 | \$43.50 |
| 103 | 24" Solid Tee | EA | \$1,770.00 | \$2,125.00 |
| 104 | 24" x 24" x 24" Wye | EA | \$2,950.00 | \$2,125.00 |
| 105 | 24" Flange Set, adapters, seals, gaskets and bolt pack | Set | \$2,478.00 | \$2,250.00 |
| 106 | 24" Blind Flange Set adapters, seals, gaskets and bolt pack | Set | \$2,124.00 | \$1,025.00 |
| 107 | 24" 45 Degree Elbow | EA | \$708.00 | \$1,150.00 |
| 108 | 24" 90 Degree Elbow | EA | \$826.00 | \$1,150.00 |
| 109 | 24" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers ¹ | Set | \$13,688.00 | \$2,150.00 |
| 110 | 24" Electro-fusion Coupling ¹ | EA | \$1,770.00 | \$1,725.00 |
| | 22" Pipe | | 1 | - |
| 120 | 22" Solid SDR 17 Buried 4' max. to Top of pipe | LF | \$132.16 | \$56.00 |
| 121 | 22" Solid SDR 17 Above ground | LF | \$132.16 | \$43.50 |
| 122 | 22" Solid Tee | EA | \$1,298.00 | \$2,125.00 |
| 123 | 22" x 22" x 22" Wye | EA | \$2,714.00 | \$2,125.00 |
| 124 | 22" Flange Set, adapters, seals, gaskets and bolt pack | Set | \$2,124.00 | \$2,250.00 |
| 125 | 22" Blind Flange Set adapters, seals, gaskets and bolt pack | Set | \$1,947.00 | \$1,025.00 |
| 126 | 22" 45 Degree Elbow | EA | \$649.00 | \$1,150.00 |
| 127 | 22"90DegreeElbow | EA | \$743.40 | \$1,150.00 |
| 128 | 22" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers ¹ | Set | \$15,812.00 | \$2,150.00 |
| 129 | 22" Electro-fusion Coupling | EA | \$1,534.00 | \$1,725.00 |
| | 20" Pipe | | | - |
| 130 | 20" Solid SDR 17 Buried 4' max. to Top of pipe | LF | \$105.02 | \$53.50 |
| 131 | 20" Solid SDR 17 Above ground | LF | \$105.02 | \$41.50 |
| 132 | 20" Solid Tee | EA | \$1,150.50 | \$2,100.00 |
| 133 | 20" x 20" x 20" Wye | EA | \$2,478.00 | \$2,100.00 |
| 134 | 20" Flange Set, adapters, seals, gaskets and bolt pack | Set | \$1,947.00 | \$2,130.00 |
| 135 | 20" Blind Flange Set adapters, seals, gaskets and bolt pack | Set | \$1,770.00 | \$975.00 |
| 136 | 20" 45 Degree Elbow | EA | \$590.00 | \$1,125.00 |
| 137 | 20"90DegreeElbow | EA | \$725.70 | \$1,125.00 |
| 138 | 20" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers ¹ | Set | \$8,319.00 | \$2,125.00 |
| 139 | 20" Electro-fusion Coupling ¹ | EA | \$1,416.00 | \$1,650.00 |
| | 18" Pipe | | | |
| 140 | 18" Solid SDR 17 Buried 4' max. to Top of pipe | LF | \$73.16 | \$40.00 |
| 141 | 18" Solid SDR 17 Above ground | LF | \$73.16 | \$30.00 |
| 142 | 18" Solid Tee | EA | \$743.40 | \$875.00 |
| 143 | 18" x 18" x 18" Wye | EA | \$1,534.00 | \$875.00 |
| 144 | 18" Flange Set, adapters, seals, gaskets and bolt pack | Set | \$1,475.00 | \$1,050.00 |
| 145 | 18" Blind Flange Set adapters, seals, gaskets and bolt pack | Set | \$1,357.00 | \$780.00 |

RATE SHEET - PART II MATERIALS AND INSTALLATION - 3 YEAR RATES

| I47 I8° 90 Degree Elbow EA \$\$900.00 \$780.00 I48 I8° kohaton Valve proxy Coated Cast Iron - includes Viton Seal, wear boats each spacers' Set \$66,844.00 \$1,525.00 I49 I8° x & Electrofusion Saddle EA \$885.00 \$7725.00 I51 I8° x & Electrofusion Saddle EA \$844.00 \$725.00 I52 I8° Tull Face Gnasket EA \$544.00 \$725.00 I52 I8° Tull Face Gnasket EA \$531.00 \$375.00 I2° Solid SDR 17 Buried 4' max. to Top of pipe LF \$40.12 \$38.00 I60 12° Solid SDR 17 Above ground LF \$40.12 \$38.00 I61 12° x 12° x 12< Wye EA \$531.00 \$490.00 I64 12° star \$17 x 12° wye EA \$460.20 \$490.00 I66 12° Bind Flange Set adapters, seals, gaskets and bolt pack Set \$590.00 \$490.00 I66 12° Bind Flange Set adapters, asels, gaskets and bolt pack Set \$31.00 \$490.00 I67 Bind Flange Set adapters, a | 146 | 18" 45 Degree Elbow | EA | \$472.00 | \$780.00 | | | | |
|---|-----|---|-----|------------|------------|--|--|--|--|
| 148 Iss balaim Valve Epoxy Couted Cast Iron - includes Viton Scal, gen box, seals, spaces i Set \$6,844.00 \$1,525.00 149 18" x 8" Electrofusion Saddle EA \$885.00 \$725.00 150 18" x 4" Electrofusion Saddle EA \$8472.00 \$725.00 151 18" x 4" Electrofusion Saddle EA \$8472.00 \$725.00 152 18" Full Face Casket EA \$21.04 \$\$755.00 152 18" Full Face Casket EA \$21.04 \$\$375.00 153 18" x 4" Electrofusion Saddle EA \$21.04 \$\$375.00 153 18" rA" Electrofusion Saddle EA \$21.04 \$\$375.00 154 12" Full Face Casket EA \$21.04 \$\$375.00 154 12" Flange Set, adapters, seals, gaskets and bolt pack Set \$\$540.00 \$490.00 166 12" Pange Set, adapters, seals, gaskets and bolt pack Set \$3540.00 \$490.00 166 12" Solid DR TA Burge Set, adapters, seals, gaskets Set \$3540.00 \$490.00 167 12" | | | | | | | | | |
| pear box, seals, spacers 1" Set \$3,25.00 \$1,25.00 19 18" x 6" Electrofusion Saddle EA \$649.00 \$725.00 150 18" x 6" Electrofusion Saddle EA \$649.00 \$725.00 151 18" x 4" Electrofusion Saddle EA \$541.00 \$725.00 151 18" Flat HDPE Cap with 2" HDPE Outlet EA \$531.00 \$375.00 152 18" Flat HDPE Cap with 2" HDPE Outlet EA \$531.00 \$375.00 160 12" Solid SDR 17 Buried 4" max. to Top of pipe LF \$40.12 \$38.00 161 12" Solid SDR 17 Above ground LF \$40.12 \$20.00 162 12" X12" x 12" x 12" Wye EA \$531.00 \$490.00 164 12" Solid SDR 17 Above ground EA \$540.00 \$490.00 164 12" Boaler Flaws estal.gaskets and bolt pack Set \$549.00 \$490.00 165 12" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$33.056.20 \$1,250.00 166 12" 45 Degree Elbow EA \$460.2 | | | | | | | | | |
| 150 18" x 4" Electrofusion Saddle EA \$647,000 \$725,00 151 18" rull Face Gasket EA \$472,000 \$725,00 152 18" Full Face Gasket EA \$21,24 \$534,00 153 18" Full Face Gasket EA \$21,24 \$534,00 153 18" Full Face Gasket EA \$21,24 \$534,00 154 18" Fall HDPE Cap with 2" HDPE Outlet EA \$524,00 \$375,00 160 12" Solid SDR 17 Buried 4" max, to Top of pipe LF \$40,12 \$38,00 164 12" Solid SDR 17 Above ground LF \$40,12 \$38,00 164 12" Solid SDR 17 Wye EA \$520,00 \$490,00 165 12" Sladior Valve Epoxy Cated Cast Iron - includes Viton Seal, gaskets and bolt pack Set \$3,562,02 \$1,250,00 167 12" Sladior Valve Epoxy Cated Cast Iron - includes Viton Seal, gasters Set \$3,540,00 \$12,50,00 168 10" Solid SDR 17 Buried 4" max, to Top of pipe LF \$28,32 \$37,00 12" Electro-fusion Coupling <t< th=""><th>140</th><th>gear box, seals, spacers¹</th><th>Set</th><th>\$6,844.00</th><th>\$1,525.00</th></t<> | 140 | gear box, seals, spacers ¹ | Set | \$6,844.00 | \$1,525.00 | | | | |
| 151 18" K 4" Electrofusion Saddle EA \$472.00 \$725.00 152 18" Flat HDPE Cap with 2" HDPE Outlet EA \$51.24 \$54.00 153 18" Flat HDPE Cap with 2" HDPE Outlet EA \$531.00 \$375.00 160 12" Solid SDR 17 Buried 4" max. to Top of pipe LF \$40.12 \$38.00 161 12" Solid SDR 17 Above ground LF \$40.12 \$30.00 162 12" Solid Tee EA \$620.68 \$490.00 164 12" Flange Set, adapters, seals, gaskets and bolt pack Set \$649.00 \$490.00 165 12" Bind Flange Set adapters, seals, gaskets and bolt pack Set \$53.056.20 \$490.00 166 12" stolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gascets Set \$3.056.20 \$1.250.00 169 12" Butterfly Valve with adapters and bolt pack Set \$3.3056.20 \$1.250.00 169 12" Butterfly Valve with adapters and bolt pack Set \$3.4000 \$1.250.00 169 10" Solid SDR 17 Buried 4" max. to Top of pipe LF \$28.32 \$3. | 149 | 18" x 8" Electrofusion Saddle | EA | \$885.00 | \$725.00 | | | | |
| 152 18" Full Face Gasket EA \$21.24 \$\$4.00 153 18" Flar HDPE Cap with 2" HDPE Outlet EA \$\$37.00 \$\$375.00 160 12" Solid SDR 17 Buried 4" max. to Top of pipe LF \$\$40.12 \$\$38.00 161 12" Solid SDR 17 Above ground LF \$\$40.12 \$\$20.00 162 12" Solid TCe EA \$\$531.00 \$\$490.00 164 12" x 12" x 12" Wye EA \$\$531.00 \$\$490.00 164 12" Flange Set, adapters, seals, gaskets and bolt pack Set \$\$649.00 166 12" Blind Flange Set adapters, and seaks gaskets and bolt pack Set \$\$490.00 166 12" dotation Valve Epoxy Coated Cast Iron - includes Viton Seal, geners Set \$\$3,056.20 \$1,250.00 167 12" Blotd SDR 17 Buried 4" max. to Top of pipe LF \$28.32 \$37.00 170 12" Electro-fusion Coupling EA \$447.00 \$400.00 180 10" Solid SDR 17 Buried 4" max. to Top of pipe LF \$28.32 \$37.00 181 10" Solid SDR 17 Above ground | 150 | 18" x 6" Electrofusion Saddle | EA | \$649.00 | \$725.00 | | | | |
| 153 18" Flat HDPE Cap with 2" HDPE Outlet EA \$\$31.00 \$\$375.00 I2" Solid SDR 17 Buried 4' max, to Top of pipe LF \$\$40.12 \$\$38.00 161 12" Solid SDR 17 Above ground LF \$\$40.12 \$\$20.00 162 12" Solid Tee EA \$\$521.00 \$\$490.00 163 12" Tange Set, adapters, seals, gaskets and bolt pack Set \$\$649.00 \$\$490.00 164 12" Flange Set, adapters, seals, gaskets and bolt pack Set \$\$649.00 \$\$490.00 166 12" 45 Degree Elbow EA \$\$460.20 \$\$490.00 167 12" 90 Degree Elbow EA \$\$460.20 \$\$490.00 167 12" solation Valve Epoxy Coated Cast Iron - includes Viton Seal, gasters and bolt pack Set \$\$3.056.20 \$1.250.00 170 12" Electro-fusion Coupling EA \$\$472.00 \$400.00 181 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$\$28.32 \$37.00 182 10" Solid SDR 17 Above ground LF \$\$28.32 \$37.00 181 <td< th=""><th>151</th><th>18" x 4" Electrofusion Saddle</th><th>EA</th><th>\$472.00</th><th>\$725.00</th></td<> | 151 | 18" x 4" Electrofusion Saddle | EA | \$472.00 | \$725.00 | | | | |
| 12" Pine 160 12" Solid SDR 17 Buried 4' max. to Top of pipe LF \$40.12 \$38.00 161 12" Solid SDR 17 Above ground LF \$40.12 \$38.00 162 12" Solid SDR 17 Above ground LF \$40.12 \$38.00 163 12" x 12" x 12" X1" Wye EA \$520.68 \$490.00 164 12" Flange Set, adapters, seals, gaskets and bolt pack Set \$5490.00 \$4490.00 166 12" 45 Degree Elbow EA \$460.20 \$490.00 166 12" 45 Degree Elbow EA \$460.20 \$490.00 167 12" 90Degree Elbow EA \$460.20 \$490.00 167 12" 90Degree Elbow EA \$460.20 \$490.00 168 12" solation Valve Epoxy Coated Cast Iron - includes Viton Seal, gentburthy Valve with adapters and bolt pack Set \$3.305.62.0 \$1.250.00 170 12" Electro-fusion Coupling EA \$472.00 \$400.00 180 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$28.32 \$37.00 181 | | | EA | \$21.24 | | | | | |
| 160 12" Solid SDR 17 Buried 4' max. to Top of pipe L.F \$40.12 \$38.00 161 12" Solid SDR 17 Above ground L.F \$40.12 \$20.00 162 12" x 12" x 12" Wye EA \$520.68 \$490.00 163 12" x 12" x 12" Wye EA \$531.00 \$490.00 164 12" Flange Set, adapters, seals, gaskets and bolt pack Set \$590.00 \$490.00 166 12" 45 Degree Elbow EA \$460.20 \$490.00 166 12" toolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers \$460.20 \$490.00 167 12" Butterfly Valve with adapters and bolt pack Set \$3,056.20 \$1,250.00 170 12" Electro-fusion Coupling EA \$440.20 \$400.00 170 12" Butterfly Valve with adapters and bolt pack Set \$3,356.20 \$1,250.00 180 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$28.32 \$37.00 181 10" Solid SDR 17 Above ground LF \$28.53 \$490.00 183 | 153 | | EA | \$531.00 | \$375.00 | | | | |
| 161 12" Solid SDR 17 Above ground LF \$40.12 \$20.00 162 12" Solid Tee EA \$531.00 \$490.00 164 12" Flange Set, adapters, seals, gaskets and bolt pack Set \$649.00 \$490.00 164 12" Flange Set, adapters, seals, gaskets and bolt pack Set \$590.00 \$490.00 166 12" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$460.20 \$490.00 166 12" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, get box, seals, spacers Stat.00 \$477.00 \$490.00 167 12" Butterfly Valve with adapters and bolt pack Set \$3,3056.20 \$1,250.00 169 12" Butterfly Valve with adapters and bolt pack Set \$3,40.00 \$1,250.00 170 12" Electro-fusion Coupling EA \$472.00 \$400.00 181 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$28.32 \$20.00 182 10" Solid SDR 17 Above ground LF \$28.32 \$20.00 183 10" Solid SDR 17 Above ground LF \$28.32 < | | <u>12'' Pipe</u> | | | | | | | |
| 162 12" Solid Tee EA \$620.68 \$490.00 164 12" x 12" x 12" X 12" Wye EA \$531.00 \$490.00 165 12" Blind Flange Set, adapters, seals, gaskets and bolt pack Set \$549.00 \$490.00 165 12" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$590.00 \$490.00 166 12" 45 Degree Elbow EA \$460.20 \$490.00 167 12" Bolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gast with adapters and bolt pack Set \$3,056.20 \$1,250.00 169 12" Butterfly Valve with adapters and bolt pack Set \$3,40.00 \$1,250.00 170 12" Electro-fusion Coupling EA \$472.00 \$400.00 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$28.32 \$27.00 181 10" Solid SDR 17 Above ground LF \$28.32 \$27.00 182 10" Solid Tee EA \$531.00 \$490.00 183 10" Solid Tee EA \$445.60 \$490.00 184 10" Solid Tee | 160 | 12" Solid SDR 17 Buried 4' max. to Top of pipe | LF | \$40.12 | \$38.00 | | | | |
| 163 12" x 12" x 12" x 12" Wyc EA \$\$31.00 \$\$490.00 164 12" Flange Set, adapters, seals, gaskets and bolt pack Set \$\$590.00 \$\$490.00 165 12" Blind Flange Set, adapters, seals, gaskets and bolt pack Set \$\$590.00 \$\$490.00 166 12" 45 Degree Elbow EA \$460.20 \$\$490.00 167 12" Bolato R140x Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$3.056.20 \$1,250.00 168 12" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$3.056.20 \$1,250.00 170 12" Electro-fusion Coupling EA \$472.00 \$400.00 180 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$28.32 \$32.00 181 10" Solid SDR 17 Above ground LF \$28.32 \$30.00 184 10" Solid SDR 17 Above ground LF \$28.32 \$400.00 184 10" Solid SDR 17 Above ground EA \$445.60 \$490.00 184 10" Solid SDR 17 Above ground EA \$445.60 | 161 | 12" Solid SDR 17 Above ground | LF | \$40.12 | \$20.00 | | | | |
| 164 12" Flange Set, adapters, seals, gaskets and bolt pack Set \$64.9.00 \$490.00 165 12" Bind Flange Set adapters, seals, gaskets and bolt pack Set \$590.00 \$4490.00 166 12" 45 Degree Elbow EA \$4460.20 \$490.00 167 12" Bolation Valve Epoxy Coated Cast Iron - includes Viton Seal, geat box, seals, spacers \$3,056.20 \$1,250.00 169 12" Butterfly Valve with adapters and bolt pack Set \$3,3056.20 \$1,250.00 169 12" Electro-fusion Coupling EA \$472.00 \$440.00 170 12" Electro-fusion Coupling EA \$472.00 \$400.00 180 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$28.32 \$37.00 181 10" Solid SDR 17 Above ground LF \$28.32 \$20.00 183 10" Solid Tee EA \$430.60 \$4490.00 184 10" Solid Tee EA \$448.60 \$4490.00 184 10" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$413.00 \$4490.00 185 | 162 | | EA | \$620.68 | \$490.00 | | | | |
| 165 12" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$590.00 \$4490.00 166 12" 45 Degree Elbow EA \$460.20 \$4490.00 167 12" golagree Elbow EA \$460.20 \$490.00 168 12" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gaar box, scals, spacers Set \$3,056.20 \$1,250.00 170 12" Butterfly Valve with adapters and bolt pack Set \$3,40.00 \$1,250.00 170 12" Electro-fusion Coupling 10" Pipe EA \$472.00 \$400.00 181 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$28.32 \$20.00 182 10" Solid SDR 17 Above ground LF \$28.32 \$20.00 183 10" x 10" Wye EA \$495.60 \$490.00 184 10" Flange Set, adapters, seals, gaskets and bolt pack Set \$436.60 \$490.00 184 10" abation Valve Epoxy Coated Cast Iron - includes Viton Seal, gaar box, seals, spacers \$4413.00 \$4490.00 185 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gaar box, seals, spac | 163 | 12" x 12" x 12" Wye | EA | \$531.00 | \$490.00 | | | | |
| 166 12" 45 Degree Elbow EA \$460.20 \$490.00 167 12"90 Degree Elbow EA \$460.20 \$490.00 168 12" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$3,056.20 \$1,250.00 169 12" Butterfly Valve with adapters and bolt pack Set \$3,540.00 \$1,250.00 170 12" Electro-fusion Coupling EA \$472.00 \$400.00 10" Pipe 180 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$28.32 \$27.00 181 10" Solid Tee EA \$495.60 \$490.00 182 10" Solid Tee EA \$435.60 \$490.00 183 10" Flange Set, adapters, seals, gaskets and bolt pack Set \$443.60 \$490.00 184 10" Solation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$2448.40 \$490.00 187 10" Solation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$246.20 \$1,250.00 189 10" Buterfly Valve | 164 | 12" Flange Set, adapters, seals, gaskets and bolt pack | Set | \$649.00 | \$490.00 | | | | |
| 167 12" 90 Degree Elbow EA \$460.20 \$490.00 168 12" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$3,056.20 \$1,250.00 169 12" Butterfly Valve with adapters and bolt pack Set \$3,056.20 \$1,250.00 170 12" Electro-fusion Coupling EA \$472.00 \$400.00 180 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$28.32 \$37.00 181 10" Solid SDR 17 Above ground LF \$28.32 \$37.00 182 10" Solid Tee EA \$495.60 \$490.00 183 10" x 10" Wye EA \$436.60 \$490.00 184 10" Flange Set, adapters, seals, gaskets and bolt pack Set \$413.00 \$490.00 185 10" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$448.40 \$490.00 186 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$2,466.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,867.4 | | | | | | | | | |
| 168 12" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$3,056.20 \$1,250.00 169 12" Butterfly Valve with adapters and bolt pack Set \$3,540.00 \$1,250.00 170 12" Electro-fusion Coupling EA \$472.00 \$400.00 IO" Pipe 180 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$28.32 \$20.00 181 10" Solid SDR 17 Above ground LF \$28.32 \$20.00 182 10" Solid Tce EA \$495.60 \$490.00 183 10" x 10" x 10" Wye EA \$445.60 \$490.00 184 10" Flange Set, adapters, seals, gaskets and bolt pack Set \$413.00 \$490.00 185 10" Bolgree Elbow EA \$448.40 \$490.00 186 10" Ioslation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$2,466.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,866.20 \$1,250.00 189 10" Butterfly Valve with adapters and bol | | ĕ | | | | | | | |
| Set Set <th></th> <th></th> <th>EA</th> <th>\$460.20</th> <th>\$490.00</th> | | | EA | \$460.20 | \$490.00 | | | | |
| Instruct of the second secon | 168 | | Set | \$3,056.20 | \$1,250.00 | | | | |
| 170 12" Electro-fusion Coupling 10" Pipe 180 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$28.32 \$37.00 181 10" Solid SDR 17 Above ground LF \$28.32 \$20.00 182 10" Solid SDR 17 Above ground LF \$28.32 \$20.00 182 10" Solid SDR 17 Above ground EA \$5531.00 \$490.00 183 10" x 10" x 10" Wye EA \$495.60 \$490.00 184 10" Flange Set, adapters, seals, gaskets and bolt pack Set \$413.00 \$490.00 185 10" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$448.40 \$490.00 186 10" 45 Degree Elbow EA \$448.40 \$490.00 187 10" 90 DegreeElbow EA \$448.40 \$490.00 188 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$2,466.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,867.40 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,867.40 \$1,250.00 | 160 | gear box, seals, spacers 12" Butterfly Valve with adapters and holt pack | | | | | | | |
| 10" Pipe 180 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$28.32 \$37.00 181 10" Solid SDR 17 Above ground LF \$28.32 \$20.00 182 10" Solid SDR 17 Above ground LF \$28.32 \$20.00 182 10" Solid SDR 17 Above ground LF \$28.32 \$20.00 183 10" x 10" x 10" Wye EA \$495.60 \$490.00 184 10" Flange Set, adapters, seals, gaskets and bolt pack Set \$436.60 \$490.00 185 10" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$448.40 \$490.00 186 10" 90 Degree Elbow EA \$448.40 \$490.00 187 10" 90 Degree Elbow EA \$448.40 \$490.00 188 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, geat box, seals, spacers Set \$2,466.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,867.40 \$1,250.00 190 10" Electro-fusion Coupling EA \$4401.20 \$400.00 | | | | | | | | | |
| 10" Solid SDR 17 Buried 4' max. to Top of pipe LF \$28.32 \$37.00 181 10" Solid SDR 17 Above ground LF \$28.32 \$20.00 182 10" Solid SDR 17 Above ground LF \$28.32 \$20.00 182 10" Solid Tee EA \$531.00 \$490.00 183 10" x 10" x 10" Wye EA \$495.60 \$4490.00 184 10" Flange Set, adapters, seals, gaskets and bolt pack Set \$413.00 \$490.00 185 10" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$413.00 \$490.00 186 10" 45 Degree Elbow EA \$448.40 \$490.00 187 10"90 Degree Elbow EA \$448.40 \$490.00 188 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$2,466.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,466.20 \$1,250.00 190 10" Electro-fusion Coupling EA \$401.20 \$400.00 200 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 | 170 | 1 0 | LA | \$472.00 | \$400.00 | | | | |
| 181 10" Solid SDR 17 Above ground LF \$28.32 \$20.00 182 10" Solid Tee EA \$531.00 \$490.00 183 10" x 10" x 10" Wye EA \$495.60 \$490.00 184 10" Flange Set, adapters, seals, gaskets and bolt pack Set \$436.60 \$490.00 185 10" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$443.00 \$490.00 186 10" 45 Degree Elbow EA \$448.40 \$490.00 187 10"90 Degree Elbow EA \$448.40 \$490.00 188 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gar box, seals, spacers Set \$2,466.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,867.40 \$1,250.00 190 10" Electro-fusion Coupling EA \$401.20 \$400.00 200 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Above ground LF \$17.70 \$350.00 203 8" x 8" X8" Wye EA \$354.00 \$350.00 204 | 180 | | IF | \$28.32 | \$37.00 | | | | |
| 182 10" Solid Tee EA \$531.00 \$490.00 183 10" x 10" x 10" Wye EA \$495.60 \$490.00 184 10" Flange Set, adapters, seals, gaskets and bolt pack Set \$436.60 \$490.00 185 10" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$413.00 \$490.00 186 10" 45 Degree Elbow EA \$448.40 \$490.00 187 10" 90 Degree Elbow EA \$448.40 \$490.00 188 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$2,466.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,867.40 \$1,250.00 190 10" Electro-fusion Coupling EA \$440.1.20 \$400.00 10" Butterfly Valve with adapters of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.00 202 8" Solid SDR 17 Above ground LF \$17.70 \$35.00 202 8" Solid SDR 17 Above ground EA \$354.00 \$350.00 <tr< th=""><th></th><th></th><th></th><th></th><th></th></tr<> | | | | | | | | | |
| 183 10" x 10" x 10" Wye EA \$495.60 \$490.00 184 10" Flange Set, adapters, seals, gaskets and bolt pack Set \$436.60 \$490.00 185 10" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$443.60 \$490.00 186 10" 45 Degree Elbow EA \$448.40 \$490.00 187 10" 90 Degree Elbow EA \$448.40 \$490.00 188 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$2,466.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,867.40 \$1,250.00 190 10" Electro-fusion Coupling EA \$401.20 \$400.00 8" Pipe 200 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Above ground LF \$17.70 \$35.00 202 8" Solid SDR 17 Above ground LF \$17.70 \$35.00 204 8" Branch Saddle EA \$478.00 \$300.00 203 8" x 8" x 8" Wye EA \$247.80 | | | | - | | | | | |
| 184 10" Flange Set, adapters, seals, gaskets and bolt pack Set \$436.60 \$490.00 185 10" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$413.00 \$490.00 186 10" 45 Degree Elbow EA \$448.40 \$490.00 187 10" 90 Degree Elbow EA \$448.40 \$490.00 187 10" 90 Degree Elbow EA \$448.40 \$490.00 188 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$2,466.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,867.40 \$1,250.00 190 10" Electro-fusion Coupling EA \$440.20 \$400.00 200 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Above ground LF \$17.70 \$35.00 202 8" Solid Tee EA \$177.00 \$35.00 203 8" x 8" x 8" Wye EA \$354.00 \$350.00 204 8" Branch Saddle EA \$354.00 \$300.00 205 8" | | | | | | | | | |
| 185 10" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$413.00 \$490.00 186 10" 45 Degree Elbow EA \$448.40 \$490.00 187 10" 90 Degree Elbow EA \$448.40 \$490.00 188 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$2,466.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,466.20 \$1,250.00 190 10" Electro-fusion Coupling EA \$4401.20 \$400.00 8" Pipe 200 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Above ground LF \$17.70 \$350.00 203 8" x 8" x 8" Wye EA \$354.00 \$350.00 204 8" Branch Saddle EA \$354.00 \$350.00 204 8" Branch Saddle EA \$354.00 \$350.00 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$226.00 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set <th></th> <th></th> <th></th> <th></th> <th></th> | | | | | | | | | |
| 186 10" 45 Degree Elbow EA \$448.40 \$490.00 187 10" 90 Degree Elbow EA \$448.40 \$490.00 188 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$2,466.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,867.40 \$1,250.00 190 10" Electro-fusion Coupling EA \$4401.20 \$400.00 8" Pipe 200 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Above ground LF \$17.70 \$350.00 202 8" Solid Tee EA \$17.00 \$350.00 203 8" x 8" x 8" Wye EA \$354.00 \$350.00 204 8" Branch Saddle EA \$350.00 \$425.00 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$226.00 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set | | | | | | | | | |
| 187 10"90 Degree Elbow EA \$448.40 \$490.00 188 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$2,466.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,867.40 \$1,250.00 190 10" Electro-fusion Coupling EA \$401.20 \$400.00 8" Pipe 200 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Above ground LF \$17.70 \$35.00 202 8" Solid Tee EA \$19.50 203 8" x 8" x 8" Wye EA \$17.00 \$350.00 204 8" Branch Saddle EA \$177.00 \$350.00 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$247.80 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$247.80 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set </th <th></th> <th></th> <th></th> <th></th> <th></th> | | | | | | | | | |
| 188 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$2,466.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,867.40 \$1,250.00 190 10" Electro-fusion Coupling EA \$401.20 \$400.00 8" Pipe 200 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Above ground LF \$17.70 \$19.50 202 8" Solid Tee EA \$477.00 \$350.00 203 8" x 8" x 8" Wye EA \$354.00 \$350.00 204 8" Branch Saddle EA \$354.00 \$350.00 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$247.80 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 207 8" 45 Degree Elbow EA \$141.60 \$300.00 208 8" 90 Degree Elbow EA \$141.60 \$300.00 | | | | | | | | | |
| gear box, seals, spacers Set \$2,406.20 \$1,250.00 189 10" Butterfly Valve with adapters and bolt pack Set \$2,867.40 \$1,250.00 190 10" Electro-fusion Coupling EA \$401.20 \$400.00 8" Pipe 200 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Above ground LF \$17.70 \$19.50 202 8" Solid Tee EA \$177.00 \$350.00 203 8" x 8" x 8" Wye EA \$177.00 \$350.00 204 8" Branch Saddle EA \$354.00 \$350.00 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$247.80 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 206 8" 90 Degree Elbow EA \$141.60 \$300.00 207 8" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$1,557.60 \$750.00 208 8" Butterfly Valve with adapters and bolt pack Set \$1,770.00 | | | LA | \$448.40 | \$490.00 | | | | |
| 189 10" Butterfly Valve with adapters and bolt pack Set \$2,867.40 \$1,250.00 190 10" Electro-fusion Coupling EA \$401.20 \$400.00 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Above ground LF \$17.70 \$35.60 202 8" Solid SDR 17 Above ground LF \$17.70 \$35.00 203 8" x 8" x 8" Wye EA \$177.00 \$350.00 204 8" Branch Saddle EA \$354.00 \$330.00 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$247.80 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 206 8" 90 Degree Elbow EA \$141.60 \$300.00 207 8" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$1,557.60 \$750.00 208 8" on p-butt fused Set \$1,770.00 \$750.00 \$750.00 \$75 | 188 | 10" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, | Set | \$2,466.20 | \$1,250.00 | | | | |
| 190 10" Electro-fusion Coupling EA \$401.20 \$400.00 8" Pipe 200 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Above ground LF \$17.70 \$35.60 202 8" Solid SDR 17 Above ground LF \$17.70 \$19.50 202 8" Solid Tee EA \$177.00 \$350.00 203 8" x 8" x 8" Wye EA \$354.00 \$350.00 204 8" Branch Saddle EA \$354.00 \$350.00 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$247.80 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 206 8" 90 Degree Elbow EA \$141.60 \$300.00 207 8" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$1,557.60 \$750.00 210 8" Butterfly Valve with adapters and bolt pack Set \$1,770.00 \$750.00 211 8" Cap – butt fused EA \$64.90 \$135.00 | 189 | | Set | \$2,867,40 | \$1 250 00 | | | | |
| 8" Pipe 200 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Above ground LF \$17.70 \$19.50 202 8" Solid Tee EA \$177.00 \$350.00 203 8" x 8" x 8" Wye EA \$177.00 \$350.00 203 8" x 8" x 8" Wye EA \$354.00 \$350.00 204 8" Branch Saddle EA \$354.00 \$350.00 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$247.80 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 207 8" 45 Degree Elbow EA \$141.60 \$300.00 208 8" 90 Degree Elbow EA \$141.60 \$300.00 209 8" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$1,557.60 \$750.00 210 8" Butterfly Valve with adapters and bolt pack Set \$1,770.00 \$750.00 211 8" | | | | | | | | | |
| 200 8" Solid SDR 17 Buried 4' max. to Top of pipe LF \$17.70 \$35.60 201 8" Solid SDR 17 Above ground LF \$17.70 \$19.50 202 8" Solid Tee EA \$177.00 \$350.00 203 8" x 8" x 8" Wye EA \$177.00 \$350.00 204 8" Branch Saddle EA \$354.00 \$350.00 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$247.80 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 207 8" 45 Degree Elbow EA \$141.60 \$300.00 208 8" 90 Degree Elbow EA \$141.60 \$300.00 209 8" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$1,557.60 \$750.00 210 8" Butterfly Valve with adapters and bolt pack Set \$1,770.00 \$750.00 211 8" Cap – butt fused EA \$64.90 \$135.00 | | | | | , | | | | |
| 201 8" Solid SDR 17 Above ground LF \$17.70 \$19.50 202 8" Solid Tee EA \$177.00 \$350.00 203 8" x 8" x 8" Wye EA \$354.00 \$350.00 204 8" Branch Saddle EA \$885.00 \$425.00 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$247.80 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 207 8" 45 Degree Elbow EA \$141.60 \$300.00 208 8" 90 Degree Elbow EA \$141.60 \$300.00 209 8" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$1,557.60 \$750.00 210 8" Butterfly Valve with adapters and bolt pack Set \$1,770.00 \$750.00 211 8" Cap – butt fused EA \$64.90 \$135.00 | 200 | | LF | \$17.70 | \$35.60 | | | | |
| 202 8" Solid Tee EA \$177.00 \$350.00 203 8" x 8" x 8" Wye EA \$354.00 \$350.00 204 8" Branch Saddle EA \$354.00 \$350.00 205 8" Branch Saddle EA \$885.00 \$425.00 206 8" Blind Flange Set, adapters, seals, gaskets and bolt pack Set \$247.80 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 207 8" 45 Degree Elbow EA \$141.60 \$300.00 208 8" 90 Degree Elbow EA \$141.60 \$300.00 209 8" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$1,557.60 \$750.00 210 8" Butterfly Valve with adapters and bolt pack Set \$1,770.00 \$750.00 211 8" Cap – butt fused EA \$64.90 \$135.00 | | · · · · | | | | | | | |
| 203 8" x 8" x 8" Wye EA \$354.00 \$350.00 204 8" Branch Saddle EA \$885.00 \$425.00 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$247.80 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 207 8" 45 Degree Elbow EA \$141.60 \$300.00 208 8" 90 Degree Elbow EA \$141.60 \$300.00 209 8" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$1,557.60 \$750.00 210 8" Butterfly Valve with adapters and bolt pack Set \$1,770.00 \$750.00 211 8" Cap – butt fused EA \$64.90 \$135.00 | | | | | | | | | |
| 204 8" Branch Saddle EA \$885.00 \$425.00 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$247.80 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 207 8" 45 Degree Elbow EA \$141.60 \$300.00 208 8" 90 Degree Elbow EA \$141.60 \$300.00 209 8" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$1,557.60 \$750.00 210 8" Butterfly Valve with adapters and bolt pack Set \$1,770.00 \$750.00 211 8" Cap – butt fused EA \$64.90 \$135.00 | | | | | | | | | |
| 205 8" Flange Set, adapters, seals, gaskets and bolt pack Set \$247.80 \$300.00 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 207 8" 45 Degree Elbow EA \$141.60 \$300.00 208 8" 90 Degree Elbow EA \$141.60 \$300.00 209 8" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$1,557.60 \$750.00 210 8" Butterfly Valve with adapters and bolt pack Set \$1,770.00 \$750.00 211 8" Cap – butt fused EA \$64.90 \$135.00 | | | | | | | | | |
| 206 8" Blind Flange Set adapters, seals, gaskets and bolt pack Set \$236.00 \$300.00 207 8" 45 Degree Elbow EA \$141.60 \$300.00 208 8" 90 Degree Elbow EA \$141.60 \$300.00 209 8" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$1,557.60 \$750.00 210 8" Butterfly Valve with adapters and bolt pack Set \$1,770.00 \$750.00 211 8" Cap – butt fused EA \$64.90 \$135.00 | 205 | 8" Flange Set, adapters, seals, gaskets and bolt pack | Set | \$247.80 | \$300.00 | | | | |
| 208 8" 90 Degree Elbow EA \$141.60 \$300.00 209 8" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers Set \$1,557.60 \$750.00 210 8" Butterfly Valve with adapters and bolt pack Set \$1,770.00 \$750.00 211 8" Cap – butt fused EA \$64.90 \$135.00 | 206 | | Set | \$236.00 | \$300.00 | | | | |
| 2098" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacersSet\$1,557.60\$750.002108" Butterfly Valve with adapters and bolt packSet\$1,770.00\$750.002118" Cap - butt fusedEA\$64.90\$135.00 | 207 | | | \$141.60 | \$300.00 | | | | |
| gear box, seals, spacers Set \$1,557.60 \$750.00 210 8" Butterfly Valve with adapters and bolt pack Set \$1,770.00 \$750.00 211 8" Cap – butt fused EA \$64.90 \$135.00 | 208 | | EA | \$141.60 | \$300.00 | | | | |
| 210 8" Butterfly Valve with adapters and bolt pack Set \$1,770.00 \$750.00 211 8" Cap – butt fused EA \$64.90 \$135.00 | 209 | | Set | \$1,557.60 | \$750.00 | | | | |
| 211 8" Cap – butt fused EA \$64.90 \$135.00 | 210 | 8" Butterfly Valve with adapters and bolt pack | Set | \$1,770.00 | \$750.00 | | | | |
| | - | | | | | | | | |
| $ 212 \delta$ Electro-Tusion Coupling $ EA \delta 153.40 \delta 290.00$ | 212 | 8" Electro-fusion Coupling | EA | \$153.40 | \$290.00 | | | | |

| 215 | 8" Electro-fusion Coupling 8" SS X HDPE Transition Fitting | EA EA | \$153.40 \$472.00 | \$290.00 \$125.00 |
|-----|---|----------|----------------------|----------------------|
| 215 | 8 SS A HDr E Hanshon Fitting | LA | | |
| | | T A | | |
| | 8" SCH 80 PVC Female Adapter | EA | \$106.20 | \$22.00 |
| | 8" Powerlock Clamp | EA | \$88.50 | \$12.00 |
| 217 | 8" HDPE Ball Valve | EA | \$1,770.00 | \$300.00 |
| | 6'' Pipe | | \$10.02 | \$21 .00 |
| 220 | 6" Solid SDR 17 Buried 4' max. to Top of pipe | LF | \$10.03 | \$31.00 |
| 221 | 6" Solid SDR 17 Above ground | LF | \$10.03 | \$15.00 |
| 222 | 6" Solid Tee | EA | \$59.00 | \$340.00 |
| 223 | 6" x 6" x 6" Wye | EA | \$283.20 | \$340.00 |
| 224 | 6" Branch Saddle | EA | \$649.00 | \$400.00 |
| 225 | 6" Flange Set, adapters, seals, gaskets and bolt pack | Set | \$188.80 | \$225.00 |
| 226 | 6" Blind Flange Set adapters, seals, gaskets and bolt pack | Set | \$177.00 | \$215.00 |
| 227 | 6" 45 Degree Elbow | EA | \$53.10 | \$225.00 |
| 228 | 6" 90 Degree Elbow 6" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear | EA | \$53.10 | \$225.00 |
| 229 | box, seals, spacers | Set | \$1,215.40 | \$700.00 |
| 230 | 6" Butterfly Valve with adapters and bolt pack | Set | \$1,416.00 | \$700.00 |
| 231 | 6" Cap – butt fused | EA | \$41.30 | \$130.00 |
| | 6" Electro-fusion Coupling | EA | \$112.10 | \$275.00 |
| 233 | 6" SS X HDPE Transition Fitting | EA | \$236.00 | \$120.00 |
| 234 | 6" SCH 80 PVC Female Adapter | EA | \$88.50 | \$22.00 |
| 235 | 6" Powerlock Clamp | EA | \$70.80 | \$11.00 |
| 236 | 6" HDPE Ball Valve | EA | \$944.00 | \$210.00 |
| | 4" Pipe | | | |
| 240 | 4" Solid SDR 17 Buried 4' max. to Top of pipe | LF | \$4.72 | \$23.00 |
| 241 | 4" Solid SDR 17 Above ground | LF | \$4.72 | \$14.00 |
| 242 | 4" Solid Tee | EA | \$21.24 | \$200.00 |
| | 4" x 4" x 4" Wye | EA | \$165.20 | \$200.00 |
| | 4" Branch Saddle | EA | \$41.30 | \$250.00 |
| 245 | 4" Flange Set, adapters, seals, gaskets and bolt pack | Set | \$118.00 | \$210.00 |
| 246 | 4" Blind Flange Set adapters, seals, gaskets and bolt pack | Set | \$106.20 | \$175.00 |
| | 4" 45 Degree Elbow | EA | \$17.70 | \$175.00 |
| 248 | 4"90 Degree Elbow | EA | \$17.70 | \$175.00 |
| 249 | 4" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers | Set | \$418.90 | \$200.00 |
| 250 | 4" Butterfly Valve with adapters and bolt pack | Set | \$590.00 | \$200.00 |
| 251 | 4" Cap – butt fused | EA | \$14.16 | \$125.00 |
| | 4" Electro-fusion Coupling | EA | \$53.10 | \$260.00 |
| 253 | 4" SS X HDPE Transition Fitting | EA | \$106.20 | \$120.00 |
| 254 | 4" SCH 80 PVC Female Adapter | EA | \$56.64 | \$17.00 |
| 255 | 4" Powerlock Clamp | EA | \$35.40 | \$10.00 |
| 256 | 4" HDPE Ball Valve | EA | \$495.60 | \$165.00 |
| | 3 " Pipe | | | |
| 260 | 3" Solid SDR 17 Buried 4' max. to Top of pipe | LF | \$2.95 | \$23.00 |
| 261 | 3" Solid SDR 17 Above ground | LF | \$2.95 | \$14.00 |
| 262 | 3" Solid Tee | EA | \$18.88 | \$165.00 |
| 263 | 3" x 4" x 4" Wye | EA | \$118.00 | \$165.00 |
| | 3" Branch Saddle | EA | \$35.40 | \$250.00 |
| 264 | 5 Branch Saddle | | ψ55.40 | φ Ξ 00.00 |

| 266 | 3" Blind Flange Set adapters, seals, gaskets and bolt pack | Set | \$82.60 | \$150.00 |
|------------|---|----------|----------------------|----------------------|
| 260 | 3" 45 Degree Elbow | EA | \$15.34 | \$150.00 |
| 267 | 3"90 Degree Elbow | EA | | \$95.00 |
| 268 | 3" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear | | \$15.34 | |
| 209 | box, seals, spacers | Set | \$306.80 | \$175.00 |
| 270 | 3" Butterfly Valve with adapters and bolt pack | Set | \$413.00 | \$200.00 |
| 271 | 3" Cap – butt fused | EA | \$10.62 | \$95.00 |
| 272 | 3" Electro-fusion Coupling | EA | \$35.40 | \$165.00 |
| 273 | 3" SS X HDPE Transition Fitting | EA | \$76.70 | \$120.00 |
| 274 | 3" SCH 80 PVC Female Adapter | EA | \$35.40 | \$17.00 |
| 275 | 3" Powerlock Clamp | EA | \$29.50 | \$10.00 |
| 276 | 3" HDPE Ball Valve | EA | \$413.00 | \$150.00 |
| | 2" Pipe | 1 | I | |
| 280 | 2" Solid SDR 11 Buried 4' max. to Top of pipe | LF | \$1.77 | \$21.00 |
| 281 | 2" Solid SDR 11 Above ground | LF | \$1.77 | \$5.00 |
| 282 | 2" Solid Tee | EA | \$11.80 | \$165.00 |
| 283 | 2" x 2" x 2" Wye | EA | \$88.50 | \$125.00 |
| 284 | 2" Branch Saddle | EA | \$35.40 | \$200.00 |
| 285 | 2" Flange Set, adapters, seals, gaskets and bolt pack | Set | \$59.00 | \$125.00 |
| 286 | 2" Blind Flange Set adapters, seals, gaskets and bolt pack | Set | \$47.20 | \$120.00 |
| 287 | 2" 45 Degree Elbow | EA | \$11.80 | \$95.00 |
| 288 | 2"90DegreeElbow | EA | \$9.44 | \$95.00 |
| 289 | 2" Isolation Valve Epoxy Coated Cast Iron - includes Viton Seal, gear box, seals, spacers | Set | \$247.80 | \$175.00 |
| 290 | 2" Butterfly Valve with adapters and bolt pack | Set | \$306.80 | \$175.00 |
| 291 | 2" Cap – butt fused | EA | \$7.08 | \$75.00 |
| 292 | 2" Electro-fusion Coupling | EA | \$21.24 | \$150.00 |
| 293 | 2" SS X HDPE Transition Fitting | EA | \$53.10 | \$75.00 |
| 294 | 2" SCH 80 PVC Female Adapter | EA | \$20.06 | \$11.00 |
| 295 | 2" Powerlock Clamp | EA | \$18.88 | \$7.00 |
| 296 | 2" HDPE X PVC Transition Fitting | EA | \$82.60 | \$100.00 |
| | Other Pipe | | | |
| 300 | 1.5" Solid SDR 9 Pipe | LF | \$1.65 | \$21.00 |
| | Reducers | | | |
| 310 | 24" x 20" Reducer | EA | \$1,416.00 | |
| 311 | 24" x 18" Reducer | EA | \$1,298.00 | \$1,150.00 |
| 312 | 22" x 20" Reducer | EA | \$1,026.60 | \$1,150.00 |
| 313 | 22" x 18" Reducer | EA | \$1,652.00 | \$1,150.00 |
| 314 | 18" x 12" Reducer | EA | \$1,062.00 | \$750.00 |
| 315 | 18" x 6" Reducer | EA | \$1,475.00 | \$750.00 \$475.00 |
| 316 317 | 12" x 10" Reducer 12" x 8" Reducer | EA EA | \$165.20 \$182.90 | \$475.00 \$475.00 |
| | | | | |
| 318 319 | 10" x 8" Reducer 8" x 6" Reducer | EA EA | \$118.00 \$70.80 | \$475.00 \$290.00 |
| 319 | 6" x 4" Reducer | EA | \$70.80 | \$290.00 |
| 320 | 6" x 3" Reducer | EA | \$49.56 | \$290.00 |
| 321 | 4" x 3" Reducer | EA | \$49.30 | \$165.00 |
| 323 | 4" x 2" Reducer | EA | \$17.70 | \$165.00 |
| 323 | 3" x 2" Reducer | EA | \$13.34 | \$165.00 |
| 324 | 18" x 1 2" x 18" Reducing Tee | EA | \$1,298.00 | \$495.00 |
| 543 | 10 ATZ A10 Reducing Itt | LA | ψ1,290.00 | ψτλλιθθ |

| 326 | 12" x 8" x 12" Reducing Tee | EA | \$637.20 | \$495.00 |
|-------------------|---|------------|--------------------|----------------------|
| <u>320</u> 327 | 10" x 8" x 10" Reducing Tee | EA | \$501.50 | \$495.00 |
| 328 | 8" x 6" x 8" Reducing Tee | EA | \$247.80 | \$395.00 |
| 329 | 6" x 4" x 6" Reducing Tee | EA | \$141.60 | \$395.00 |
| | Well Heads | LIII | φ141.00 | ψ375.00 |
| 340 | 2" Horizontal Accu-Flo Wellhead Landtec and Adapter | Set | \$611.05 | \$135.00 |
| 341 | 3" Horizontal Accu-Flo Wellhead Landtec and Adapter | Set | \$1,092.01 | \$152.00 |
| 342 | 2" Vertical Accu-Flo Wellhead Landtec and Adapter | Set | \$563.95 | \$130.00 |
| 343 | 3" Vertical Accu-Flo Wellhead Landtec and Adapter | Set | \$1,048.01 | \$135.00 |
| 344 | 2" PVC Vertical ISCO Flo-Wing Wellhead and Adapter | Set | \$436.60 | \$130.00 |
| 345 | 1" PVC Vertical ISCO Flo-Wing Wellhead and Adapter | | \$383.50 | \$130.00 |
| 346 | 2" Horizontal Flow Control Wellhead QED and Adapter | | \$746.92 | \$135.00 |
| 347 | 2" (6" Well) Vertical Flow Control Wellhead QED, Adapter, Stabilizer Well Cap | Set Set | \$946.10 | \$140.00 |
| 348 | 2" (8" Well) Vertical Flow Control Wellhead QED, Adapter, Stabilizer Well Cap | Set | \$953.05 | \$140.00 |
| 349 | 3" (6" Well) Vertical Flow Control Wellhead QED, Adapter, Stabilizer Well Cap 3" (8" Well) Vertical Flow Control Wellhead QED, Adapter, | Set | \$1,415.10 | \$145.00 |
| 350 | Stabilizer Well Cap | Set | \$1,415.10 | \$145.00 |
| 351 | QED 2" Quick Change Orifice Plates Set (Vertical Wells) | Set | \$39.37 | \$11.00 |
| 352 | QED 3" Quick Change Orifice Plates Set (Vertical Wells) | Set | \$68.62 | \$11.00 |
| 353 | QED 2" Quick Change Orifice Plates Set (Horizontal Wells) | Set | \$88.01 | \$11.00 |
| | Miscellaneous | | | * • • • • • • |
| 354 | 10' x 10' Wellbore seal | EA | \$354.00 | \$825.00 |
| 355 | QED Solarguard Flex Hose-2 inch | LF | \$9.96 | \$3.40 |
| 355 A | QED Solarguard Flex Hose- 3-inch | LF | \$19.86 | \$3.40 |
| 356 | QED Banding Kit for Solarguard Flex 2-inch | Set | \$28.13 | \$5.65 |
| 356 A | QED Banding Kit for Solarguard Flex 3 inch | Set | \$35.05 | \$5.65 |
| 357 | 2" Stainless Steel Flex Hose with Steel Flanges Each End | LF | \$306.80 | \$57.00 |
| <u>358</u> 359 | 3" Stainless Steel Flex Hose with Steel Flanges Each End | LF | \$413.00 | \$87.00 |
| | 2" Kana Flex Hose | LF | \$7.08 | \$3.50 \$4.60 |
| 360 361 | 3" Kana Flex Hose | LF EA | \$10.62 \$7.08 | \$11.50 |
| 362 | Well ID Tag Granular Bentonite | LB | \$7.08 | |
| | | | | \$1.15 |
| <u>363</u> 264 | Galvanized Unistrut – Plain 1 5/8" | LF | \$8.26 \$23.60 | \$3.40 |
| <u>364</u> 365 | 6" Unistrut Pipe Clamp 8" Unistrut Pipe Clamp | EA EA | \$23.60 \$29.50 | \$11.50 \$15.00 |
| <u>365</u> 366 | 1" x 5ft Long Rebar Anchor with High Visibility HDPE Sleeve | EA | \$29.30 | \$13.00 |
| | and Safety Cap | Set | \$21.83 | \$28.00 |
| 367 | Stain Steel Gear Clamp – Up to 10" diameter | EA | \$88.50 | \$5.50 |
| | Unless otherwise stated, installation cost for materials at grade or be Does not include freight charges. Freight charges to be reimbursed | | · · · | |
| | Unit cost includes but not limited to labor, equipment, overhead, sup ional, and administrative services. Does not include direct freight ch | | | |

at cost with supporting invoice.

| | | (TASK B) | | | |
|-----|--|------------------------------|----------------------------|--------------------------------------|------------------------|
| No. | Personnel | Straight Time Hourly Rate | Overtime Hourly Rate | Emergency Services Hourly Rate | Holiday Hourly Rate |
| 1A | Senior Monitoring and Operations Technician | \$142.00 | \$213.00 | \$213.00 | \$284.00 |
| 1B | Junior Monitoring and Operations Technician | \$124.00 | \$186.00 | \$186.00 | \$248.00 |
| 1C | Monitoring and Operations Technician I | \$97.00 | \$145.50 | \$145.50 | \$194.00 |
| 2 | Mechanic (responsible for maintenance and trouble-shooting LFG | \$135.00 | \$202.50 | \$202.50 | \$270.00 |
| 3A | SeniorElectrician | \$169.00 | \$253.50 | \$253.50 | \$338.00 |
| 3B | JuniorElectrician | \$155.00 | \$232.50 | \$232.50 | \$310.00 |
| 4 | Reserved | \$N/A | \$N/A | \$N/A | \$N/A |
| 5 | Project Manager | \$215.00 | \$215.00 | \$215.00 | \$215.00 |
| 6 | Pipe Fusion Technician | \$143.00 | \$214.50 | \$214.50 | \$286.00 |
| 7 | EquipmentOperator | \$155.00 | \$232.50 | \$232.50 | \$310.00 |
| 8 | LeadTechnician | \$142.00 | \$213.00 | \$213.00 | \$284.00 |
| 9 | Principal, Construction Services | \$211.00 | \$211.00 | \$211.00 | \$211.00 |
| 10 | Mechanic/Welder | \$143.00 | \$214.50 | \$214.50 | \$286.00 |
| 11 | Manager, Landfill Gas Field Services | \$235.00 | \$235.00 | \$235.00 | \$235.00 |
| 12 | Principal Engineer | \$240.00 | \$240.00 | \$240.00 | \$240.00 |
| 13 | Engineer V | \$188.00 | \$188.00 | \$188.00 | \$188.00 |
| 14 | LFGConstruction Supervisor | \$203.00 | \$203.00 | \$203.00 | \$203.00 |
| 15 | Chief Engineering Technician | \$159.00 | \$238.50 | \$238.50 | \$318.00 |
| 16 | ProjectCoordinator | \$147.00 | \$220.50 | \$220.50 | \$294.00 |
| 17 | Environmental Specialist I | \$140.00 | \$210.00 | \$210.00 | \$280.00 |
| 18 | Senior Geologist | \$190.00 | \$190.00 | \$190.00 | \$190.00 |
| 19 | Superintendent | \$175.00 | \$262.50 | \$262.50 | \$350.00 |
| 20 | Assistant Project Manager | \$184.00 | \$184.00 | \$184.00 | \$184.00 |
| 21 | Surveyor | \$228.00 | \$342.00 | \$342.00 | \$456.00 |

RATE SHEET - PART III LABOR RATES

For work not defined in Rate Sheets – Part I, II, and III, direct cost (when authorized by County PM) will be reimbursed at cost plus not to exceed: <u>10%</u>. Rates shall be prorated between contracted items listed in Part II and non-routine work. Contractor Project Manager and County PM shall negotiate in proration in good faith.

EXHIBIT B

IMPLEMENTATION PLAN AND SCHEDULE

Contractor shall provide an implementation plan that outlines a schedule to initiate services required in this Scope of Work while providing uninterrupted service to the County during the transition from the current Contractor while assuming full responsibility of services. The implementation plan shall address proposed time frames for establishment of full Contractor services, including but not limited to, providing staff, equipment/supplies and files, manuals, and any other materials required for full operation activities.

ATTACHMENT C STAFFING PLAN AND SUBCONTRACTOR SERVICES

STAFFING PLAN

The County reserves the right to require Contractor to involve other staff members, as its services are required. The specific individual shall be assigned based on the need and timing of the staffing requirements. Assignment of additional staff shall be subject to County approval. The substitution of other individuals in any given classification/position shall be permitted only with prior written approval of the County, which shall not be unreasonably withheld.

SUBCONTRACTOR SERVICES

The Contractor shall hereinafter state that any Subcontractor(s) who will be the Subcontractor(s) on the job for each particular trade or subdivision of the work and will state the firm name and principal location of the mill, shop, or office of each. Failure to list all Subcontractors performing more than 5% of the work may be considered cause for default of the Contract.

| Subcontractor | Work, Trade, Service | License(s) | Location of Shop or Service |
|---|----------------------------------|------------|---|
| AccuLabs Environmental, LLC | Analytical Testing Lab | #99072967 | 118 La Porte Street, Unit C&D Arcadia, CA 91006 |
| AtmAA, Inc. | Laboratory Services | #94LA0405 | 23917 Craftsman Road Calabasas, CA 91302 |
| BC2 Environmental | Drilling Services/ Air Rotary | #969758 | 1150 West Trenton Avenue Orange, CA 92867 |
| Clean Harbors Environmental Services, Inc. | Hauling | #720298 | PO Box 9149 Norwell, MA 02061 |
| Frank's Industrial Services (FIS) | Electrical Services | #700250 | 1426 W. 259 th Street Harbor City, CA 90710 |
| Montrose Environmental Group, Inc. | Source Testing | #C3641073 | 1631 E. Saint Andrew Place Santa Ana, CA 92705 |
| RES Environmental Services | 1150.1 Monitoring | #C1740702 | 865 Via Lata Colton, CA 92324 |
| SD Drilling | Drilling Services | #958254 | 24660 E. Old Julian HWY Ramona, CA 92065 |