

**CONTRACT BETWEEN  
THE COUNTY OF ORANGE  
AND  
ASSOCIATED LABORATORIES  
FOR WATER QUALITY ANALYTICAL SERVICES FOR  
OC WASTE & RECYCLING**

THIS Contract *MA-299-12011170* for Water Quality Analytical Services for OC Waste & Recycling, (hereinafter referred to as "Contract") is made and entered into as of the date fully executed by and between the County of Orange, OC Waste & Recycling, a political subdivision of the State of California, (hereinafter referred to as "County") and *Associated Laboratories, 806 N. Batavia, Orange, CA 92868*, (hereinafter referred to as "Contractor"), which are sometimes individually referred to as ("Party"), or collectively referred to as ("Parties").

**RECITALS**

WHEREAS, Contractor and County are entering into this Contract for Water Quality Analytical Services for OC Waste & Recycling under a time and materials Contract; and

WHEREAS, the County solicited the scope of services as set forth herein, and Contractor has represented that it is qualified to provide scope of services to the County; and

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

WHEREAS, County agrees to pay Contractor the fees as further set forth in Contractor Certification & Rates, attached hereto as Exhibit B and incorporated herein; and

WHEREAS, County and Contractor entered into contract MA-299-12011170 for Water Quality Analytical Services for OC Waste & Recycling Facilities from April 1, 2012 through March 31, 2013, in an aggregate amount shared between two (2) Contractors not to exceed \$186,750; and

WHEREAS, County renewed the Contract for one year, effective April 1, 2013 through March 31, 2014, in an aggregate amount shared between two (2) Contractors not to exceed \$160,750; and

WHEREAS, County added Group AP (per attached) at a Unit Cost per Test of \$275.00; and add the test for hydrogen in water at a Unit Cost per Test of \$75.00; with no additional funds added to the aggregate monetary limit shared between two (2) Contractors not to exceed \$160,750; and

WHEREAS, County now desires to renew the Contract for one year, with the exception of Groups A, H, Q and AL, effective April 1, 2014 through March 31, 2015, in an aggregate amount shared between two (2) Contractors not to exceed \$186,750.

**ARTICLES**

NOW, THEREFORE, the Parties mutually agree as follows:

1. **Scope of Services:** This Contract, including Attachments, specify the contractual terms and conditions by which the Contractor shall provide **Water Quality Analytical Services** for OC Waste & Recycling under a time and materials Contract, as set forth herein.
2. **Contract Term:** This Contract shall commence upon execution of all necessary signatures and shall continue for one (1) year from that date unless otherwise terminated as provided herein. This Contract may be renewed upon expiration of the initial term, two (2)

- consecutive one-year periods, upon mutual agreement of both Parties. The County is not obligated to give a reason or notice if it elects not to renew. Renewal amendments may require approval of the County Board of Supervisors.
3. **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.
  4. **Usage:** No guarantee is given by the County to the Contractor regarding usage of this Contract. Usage figures, if provided, are approximate, based upon the last usage. The Contractor agrees to supply services requested, as needed by the County of Orange, at rates listed in the Contract, regardless of quantity requested.
  5. **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.
  6. **Contractor's Project Manager and Key Personnel:** Contractor shall appoint a Project Manager to act as liaison between the County and the Contractor during the term of this Contract and to direct the Contractor's efforts in fulfilling Contractor's obligations under this Contract. This Project Manager shall be subject to approval by the County and shall not be changed without the written consent of the County's Project Manager, which consent shall not be unreasonably withheld.

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

7. **County's Project Manager:** The County shall appoint a Project Manager to act as liaison between the County and the Contractor during the term of this Contract. The County's Project Manager 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 Key Personnel under this Contract. The County's Project Manager shall notify the Contractor in writing of such action. The Contractor shall accomplish the removal within 14 calendar days after written notice by the County's Project Manager. The County is not required to provide any reason, rationale or additional factual information if it elects to request any specific Contractor Project Manager or Key Personnel be removed from performing services under this Contract. The County's Project Manager shall review and approve the appointment of the replacement for the Contractor's Project Manager and Personnel. Said approval shall not be unreasonably withheld.

8. **Contractor's Personnel:** The Contractor warrants that all persons employed to provide service under this Contract have satisfactory past work records indicating their ability to accept the kind of responsibility anticipated under this Contract. All Contractor's personnel shall be required to wear uniforms, badges and/or other means of identification which are to

- be issued and provided by the Contractor and must be worn at all times while working on County property. The County Project Manager must be notified in writing, within seven days of notification of award of Contract, of the uniform and/or badges and/or other identification to be worn by employees prior to beginning work and notified in writing seven days prior to any changes in this procedure.
9. **Conflict of Interest:** The County of Orange Board of Supervisors' policy prohibits its employees from engaging in activities involving a conflict of interest. The Contractor shall not, during the period of this Contract, employ any County employee for any purpose. The Contractor shall exercise reasonable care and diligence to prevent any actions or conditions that could result in a conflict with the best interests of the County. This obligation shall apply to the Contractor; the Contractor's employees, agents, and relatives; sub-tier Consultants; and third parties associated with accomplishing work and services hereunder. The Contractor's efforts shall include, but not be limited to establishing precautions to prevent its employees or agents from making, receiving, providing or offering gifts, entertainment, payments, loans or other considerations which could be deemed to appear to influence individuals to act contrary to the best interests of the County.
  10. **Expenditure Limit:** The Contractor shall notify the County Project Manager in writing when the expenditures against the Contract reach 75% 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 an amendment to cover those costs has been issued and been approved by the Orange County Board of Supervisors..
  11. **Existing Site Conditions:** Information respecting 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 the County does not warrant either the completeness or accuracy of such information, and it is the responsibility of the Contractor to verify all such information.
  12. **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.
  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 years after final payment is received from the County. Storage of records in another county will require written approval from the County DPA.
  14. **Audits/Inspections:** Contractor agrees to permit the County, which may include the 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 surviving entity in a merger or acquisition or, in the event of liquidation, to the County's Project Manager.

15. **Child Support Enforcement Requirements:** Contractor is required to comply with the child support enforcement requirements of the County. Failure of the Contractor to comply with all federal, state, and local reporting requirements for child support enforcement or to comply with all lawfully served Wage and Earnings Assignment Orders and Notices of Assignment shall constitute a material breach of the Contract. Failure to cure such breach within 60 calendar days of notice from the County shall constitute grounds for termination of the Contract.
16. **Publication:** No copies of sketches, schedules, written documents, computer based data, photographs, maps or graphs, including graphic art work, resulting from performance or prepared in connection with this Contract, are to be released by Contractor and/or anyone acting under the supervision of Contractor to any person, partnership, company, corporation, or agency, without prior written approval by the County, except as necessary for the performance of the services of this Contract. All press releases, including graphic display information to be published in newspapers, magazines, etc., are to be administered only by the County unless otherwise agreed to by both Parties.
17. **News/Information Release:** The Contractor agrees that it will not issue any news releases in connection with either the award of this Contract or any subsequent amendment of or effort under this Contract without first obtaining review and written approval of said news releases from the County through the County's Project Manager.
18. **Reports/Meetings:** In addition to the requirements set forth in the Scope of Work, Exhibit A, upon County's request, the Contractor shall develop reports and any other relevant documents necessary to complete the services and requirements as set forth in this Contract. The County's Project Manager and the Contractor's Project Manager will meet on reasonable notice to discuss the Contractor's performance and progress under this Contract. If requested, the Contractor's Project Manager and other project personnel shall attend all meetings. The Contractor shall provide such information that is requested by the County for the purpose of monitoring progress under this Contract.
19. **Breach of Contract:** The failure of the Contractor to comply with any of the provisions, covenants or conditions of this Contract, shall constitute a material breach of this Contract. In such event the County may, and in addition to any other remedies available at law, in equity, or otherwise specified in this Contract:

- a. Afford the Contractor written notice of the breach and ten calendar days or such shorter time that may be specified in this Contract within which to cure the breach;
- b. Discontinue payment to the Contractor for and during the period in which the Contractor is in breach and offset against any monies billed by the Contractor but yet unpaid by the County those monies disallowed pursuant to the above.
- c. Terminate the Contract immediately without penalty.
- d. **If one Contractor fails to meet the response requirements of the contract and fails to remedy performance deficiencies according to the provisions set forth herein, that Contractor will be terminated accordingly and the other Contractor will assume total responsibility for the Contract.**

20. **Contract Disputes:** 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 (DPA), as specified in Article 25, Notices, by way of the following process:

- a. The Contractor shall submit to the County DPA 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.
- b. 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.
- c. 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 DPA. If the County fails to render a decision within 90 days after receipt of the Contractor's demand, it shall be deemed a final decision adverse to the Contractor's contentions. The County's final decision shall be conclusive and binding regarding the dispute unless the Contractor commences action in a court of competent jurisdiction to contest such decision within 90 days following the date of the County's final decision or one year following the accrual of the cause of action, whichever is later.

21. **Orderly Termination:** Upon termination or other expiration of this Contract, each Party shall promptly return to the other Party all papers, materials, and other properties of the other held by each for purposes of execution of the Contract. In addition, each Party will assist the other Party in orderly termination of this Contract and the transfer of all assets, tangible and



intangible, as may be necessary for the orderly, non-disruptive business continuation of each Party.

22. **Errors and Omissions:** All reports, files and other documents prepared and submitted by Contractor shall be complete and shall be carefully checked by the professional(s) identified by Contractor as Project Manager and personnel prior to submission to the County. Contractor agrees that County review is discretionary and Contractor shall not assume that the County will discover errors and/or omissions. If the County discovers any errors or omissions prior to approving Contractor's reports, files and other written documents, the reports, files or documents will be returned to Contractor for correction. Should the County or others discover errors or omissions in the reports, files or other written documents submitted by Contractor after County approval thereof, County approval of Contractor's reports, files or documents shall not be used as a defense by Contractor in any action between the County and Contractor, and the reports, files or documents will be returned to Contractor for correction.
23. **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.
24. **Title to Data:** 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.
25. **Notices:** Any and all notices, requests demands and other communications contemplated, called for, permitted, or required to be given hereunder shall be in writing, except through the course of the County's Project Manager and Contractor's Project Manager 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.

County: OC Waste & Recycling  
Attn: Mario Castillo  
300 N. Flower St., 4<sup>th</sup> Floor, Suite 400  
Santa Ana, CA 92703  
Phone: 714.834.4076  
[Mario.castillo@ocwr.ocgov.com](mailto:Mario.castillo@ocwr.ocgov.com)

cc: OC Waste & Recycling/Purchasing  
Attn: Purchasing Manager  
300 N. Flower St. 4<sup>th</sup> Floor, Suite 400  
Santa Ana, CA 92703

Phone: 714.834.4145  
[diane.dodson@ocwr.ocgov.com](mailto:diane.dodson@ocwr.ocgov.com)

Contractor: Associated Laboratories  
Attn: ~~Edward S. Behare~~ [Danielle Roberts](#)  
806 N. Batavia  
Orange, CA 92868  
Phone: 714.771.6900  
[droberts@associatedlabs.com](mailto:droberts@associatedlabs.com)

26. **Governing Law and Venue:** This Contract has been negotiated and executed in the State of California and shall be governed by and construed under the laws of the State of California. In the event of any legal action to enforce or interpret this Contract, the sole and exclusive venue shall be a court of competent jurisdiction located in Orange County, California, and the Parties hereto agree to and do hereby submit to the jurisdiction of such court, notwithstanding Code of Civil Procedure Section 394. Furthermore, the Parties specifically agree to waive any and all rights to request that an action be transferred for trial to another County.
27. **Entire Contract:** This Contract, including Attachments A and B which are attached hereto and incorporated herein by this reference, when accepted by the Contractor either in writing or by the shipment of any article or other commencement of performance hereunder, 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 County's Purchasing Agent or his designee.
28. **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.
29. **Taxes:** All prices shall include any applicable sales tax.
30. **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 description, or services that do not conform to the prescribed Scope 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. Overshipments and undershipments 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.
31. **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 services have been provided.
32. **Warranty:** Contractor expressly warrants that the goods/services 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 Article 41, Indemnification, and as more fully described in Article 41, 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.
33. **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 Article 41, Indemnification, 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, but not limited to, attorney's fees, costs and expenses.
34. **Assignment or Subcontracting:** 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 or subcontracted by Contractor without the express written consent of County. Any attempt by Contractor to assign or sub-contract 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.
35. **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 all the penalties imposed for a violation of Anti-Discrimination Law or regulation, including but not limited to, Section 1720 et seq. of the California Labor Code.
36. **Termination:** In addition to any other remedies or rights it may have by law and those set forth in this Contract, County has the right to terminate this Contract without penalty immediately with cause or after 30 days' written notice without cause, unless otherwise specified. Cause shall be defined as any 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 obligations.
37. **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.



38. **Remedies Not Exclusive:** The remedies for breach set forth in this Contract are cumulative as to one another and as to any other provided by law, rather than exclusive; and the expression of certain remedies in this Contract does not preclude resort by either Party to any other remedies provided by law.
39. **Independent Contractor:** Contractor shall be considered an independent Contractor and neither the Contractor, its employees, nor anyone working for Contractor under this Contract shall be considered an agent or an employee of County. Neither the Contractor, employees nor anyone working for the Contractor under this Contract shall qualify for workers' compensation or other fringe benefits of any kind through County.
40. **Performance:** Contractor shall perform 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 workman-like manner; shall furnish all labor, supervision, machinery, equipment, materials, and supplies necessary therefore; 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; and, if permitted to subcontract, shall be fully responsible for all work performed by subcontractors.
41. **Indemnification:** Contractor agrees to indemnify, defend with counsel approved in writing by County, and hold County, their elected and appointed officials, officers, employees, agents and those special districts and agencies which County's Board of Supervisors acts as the governing Board ("County Indemnitees") harmless from any claims, demands or liability of any kind or nature, including but not limited to personal injury or property damage, arising from or related to the services, products or other performance provided by Contractor pursuant to this Contract. If judgment is entered against Contractor and County by a court of competent jurisdiction because of the concurrent active negligence of County or County Indemnitees, Contractor and County agree that liability will be apportioned as determined by the court. Neither party shall request a jury apportionment.

#### **INSURANCE PROVISIONS**

Prior to the provision of services under this contract, the contractor agrees to purchase all required insurance at contractor's expense and to deposit with the County Certificates of Insurance, including all endorsements required herein, necessary to satisfy the County that the insurance provisions of this contract have been complied with and to keep such insurance coverage and the certificates therefore 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.

All self-insured retentions (SIRs) and deductibles shall be clearly stated on the Certificate of Insurance. If no SIRs or deductibles apply, indicate this on the Certificate of Insurance with a 0 by the appropriate line of coverage. Any self-insured retention (SIR) or deductible in an amount in excess of \$25,000 (\$5,000 for automobile liability), shall specifically be approved by the County Executive Office (CEO)/Office of Risk Management.

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

**Qualified Insurer**

The policy or policies of insurance must be issued by an insurer licensed to do business in the state of California (California Admitted Carrier) or have a minimum rating be 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.**

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

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

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

**Required Coverage Forms**

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

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

**Required Endorsements**

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

- 1) An Additional Insured endorsement using ISO form CG 2010 or CG 2033 or a form at least as broad naming the County of Orange, its elected and appointed officials, officers, employees, agents as Additional Insureds.
- 2) A primary non-contributing endorsement 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.

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

The Workers' Compensation policy shall contain a waiver of subrogation endorsement waiving all rights of subrogation against the County of Orange, and members of the Board of Supervisors, its elected and appointed officials, officers, agents and employees.

All insurance policies required by this contract shall give the County of Orange 30 days' notice in the event of cancellation and 10 days for non-payment of premium. This shall be evidenced by policy provisions or an endorsement separate from the Certificate of Insurance.

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

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

If the Contractor fails to provide the insurance certificates and endorsements within seven days of notification by 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 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.

42. **Bills and Liens:** Contractor shall pay promptly all indebtedness for labor, materials and equipment used in performance of the work. Contractor shall not permit any lien or charge to attach to the work or the premises, but if any does so attach, Contractor shall promptly procure its release and, in accordance with the requirements of Article 41, indemnify, defend, and hold County harmless and be responsible for payment of all costs, damages, penalties and expenses related to or arising from or related thereto.
43. **Changes:** Contractor shall make no changes in the work or perform any additional work without the County's specific written approval.
44. **Change of Ownership:** Contractor agrees that if there is a change or transfer in ownership of Contractor's business prior to completion of this Contract, 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 County.

45. **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.
46. **Confidentiality:** Contractor agrees to maintain the confidentiality of all County and County-related records and information pursuant to all statutory laws relating to privacy and confidentiality that currently exist or exist at any time during the term of this Contract. All such records and information shall be considered confidential and kept confidential by Contractor and Contractor's staff, agents and employees.
47. **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 Article 41 above, 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.
48. **Freight (F.O.B. Destination):** 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.
49. **Pricing:** The Contract rates, as more fully set forth in Exhibit B, shall include full compensation for providing all required services as specified herein, in the Scope of Work attached to this Contract, and no additional compensation will be allowed therefore, unless otherwise provided for in this Contract.
50. **Waiver of Jury Trial:** Each Party acknowledges that it is aware of and has had the opportunity to seek advise of counsel of its choice with respect to its rights to trial by jury, and each Party, for itself and its successors, creditors, and assigns, does hereby expressly and knowingly waive and release all such rights to trial by jury in any action, proceeding or counterclaim brought by any Party hereto against the other (and/or against its officers, directors, employees, agents, or subsidiary or affiliated entities) on or with regard to any matters whatsoever arising out of or in any way connected with this Contract and /or any other claim of injury or damage.
51. **Terms and Conditions:** Contractor acknowledges that it has read and agrees to all terms and conditions included in this Contract.
52. **Headings:** The various headings and numbers herein, the grouping of provisions of this Contract into separate clauses and paragraphs, and the organization hereof are for the purpose of convenience only and shall not limit or otherwise affect the meaning hereof.
53. **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.

54. **Calendar Days:** Any reference to the word “day” or “days” herein shall mean calendar day or calendar days, respectively, unless otherwise expressly provided.
55. **Attorneys Fees:** In any action or proceeding to enforce or interpret any provision of this Contract, or where any provision hereof is validly asserted as a defense, each Party shall bear its own attorney’s fees, costs and expenses.
56. **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 has 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 of 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.
57. **Authority:** The Parties to this Contract represent and warrant that this Contract has been duly authorized and executed and constitutes the legally binding obligation of their respective organization or entity, enforceable in accordance with its terms.
58. **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.
61. **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.



IN WITNESS WHEREOF, the Parties hereto have executed this Contract on the dates shown below their respective signatures below.

\*\*\*\*\*

**ASSOCIATED LABORATORIES\***

By \_\_\_\_\_

By \_\_\_\_\_

Print  
Name \_\_\_\_\_

Print  
Name \_\_\_\_\_

Title \_\_\_\_\_  
Corporate Officer

Title \_\_\_\_\_  
Corporate Officer

Date \_\_\_\_\_

Date \_\_\_\_\_

**COUNTY OF ORANGE**  
a political subdivision of the State of California

By \_\_\_\_\_

Print  
Name \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

**APPROVED AS TO FORM:**  
**County Counsel**

By \_\_\_\_\_  
Deputy

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 signator to bind the corporation.

**ATTACHMENT 2**  
**COUNTY OF ORANGE CHILD SUPPORT ENFORCEMENT**  
**CERTIFICATION REQUIREMENTS**

- A. In the case of an individual Contractor, his/her name, date of birth, Social Security number, and residence address:

Name: \_\_\_\_\_  
D.O.B: \_\_\_\_\_  
Social Security No: \_\_\_\_\_  
Residence Address: \_\_\_\_\_  
\_\_\_\_\_

- B. In the case of a Contractor doing business in a form other than as an individual, the name, date of birth, Social Security number, and residence address of each individual who owns an interest of 10 percent or more in the contracting entity:

Name: \_\_\_\_\_  
D.O.B: \_\_\_\_\_  
Social Security No: \_\_\_\_\_  
Residence Address: \_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_  
D.O.B: \_\_\_\_\_  
Social Security No: \_\_\_\_\_  
Residence Address: \_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_  
D.O.B: \_\_\_\_\_  
Social Security No: \_\_\_\_\_  
Residence Address: \_\_\_\_\_  
\_\_\_\_\_

(Additional sheets may be used if necessary)

"I certify that (Company name) is in full compliance with all applicable federal and state reporting requirements regarding its employees and with all lawfully served Wage and Earnings Assignment Orders and Notices of Assignments and will continue to be in compliance throughout the term of the Contract with the County of Orange. I understand that failure to comply shall constitute a material breach of the contract and that failure to cure such breach within 60 calendar days of notice from the County shall constitute grounds for termination of the contract."

---

Authorized Signature

Name

Title

Date

**ATTACHMENT 2 (CONTINUED)**  
**EDD INDEPENDENT CONTRACTOR REPORTING REQUIREMENTS**

Effective January 1, 2001, the County of Orange is required to file federal Form 1099-Misc for services received from a “service provider” to whom the County pays \$600 or more or with whom the County enters into a contract for \$600 or more within a single calendar year. The purpose of this reporting requirement is to increase child support collection by helping to locate parents who are delinquent in their child support obligations.

The term “service provider” is defined in California Unemployment Insurance Code Section 1088.8, subparagraph B.2 as “an individual who is not an employee of the service recipient for California purposes and who received compensation or executes a contract for services performed for that service recipient within or without the state.” The term is further defined by the California Employment Development Department to refer specifically to independent contractors. **An independent contractor is defined as “an individual who is not an employee of the government entity for California purposes and who receives compensation or executes a contract for services performed for that government entity either in or outside of California.”**

**The reporting requirement does not apply to corporations, general partnerships, limited liability partnerships, and limited liability companies.**

Additional information on this reporting requirement can be found at the California Employment Development Department web site located at [www.edd.ca.gov/txicr.htm](http://www.edd.ca.gov/txicr.htm).

To comply with the reporting requirements, County procedures for contracting with independent contractors mandate that the following information be completed and forwarded to the contracting agency/department immediately upon request:

- First name, middle initial and last name
- Social Security Number
- Address
- Start and expiration dates of contract
- Amount of contract

EDD Reporting Form

First Name	Middle Initial	Last Name
Social Security Number:		
Contract Number:		
Start Date:	Expiration Date:	
Dollar Value of Contract:		



**WATER QUALITY ANALYTICAL SERVICES**

**FOR THE**

**COUNTY OF ORANGE**

**OC WASTE & RECYCLING**

**EXHIBIT A**

**SCOPE OF WORK**



**WATER QUALITY ANALYTICAL SERVICES FOR THE COUNTY OF  
ORANGE, OC WASTE & RECYCLING**

**EXHIBIT A  
SCOPE OF WORK**

**INTRODUCTION**

The County of Orange OC Waste & Recycling (COUNTY) requires certain professional services of a primary and a secondary Contractor, (both hereinafter referred to as CONTRACTOR), to provide chemical testing and analyses of certain waters, waste material, and solids. CONTRACTOR must be a qualified chemical water-quality laboratory, meeting requirements for certification by the California Department of Health Services (DOHS) for all of the required analyses, whose work is supervised by professional chemists, and which is well-equipped and capable of rendering said services to COUNTY. The role of the secondary CONTRACTOR is to provide backup services should the primary CONTRACTOR be unable, for any reason, to provide such services. The secondary CONTRACTOR may also be called upon to conduct confirmatory tests for the purposes of independent verification of results. Both the primary and the secondary CONTRACTOR must meet all requirements as stated in this contract.

**SCOPE OF WORK**

**A. LABORATORY PROCEDURES FOR THE ANALYSES OF GROUNDWATER AND SURFACE WATERS**

COUNTY hereby engages CONTRACTOR to examine and perform chemical analyses of groundwater, surface water, and soil samples supplied by COUNTY.

CONTRACTOR shall perform all analyses of groundwater, surface water, and soil samples according to published methods presented in the following documents:

1. Standard Methods for the Examination of Water and Wastewater (APHA, AWWA, WPCF), latest edition.
2. EPA-600/4-79-020 Methods for Chemical Analysis of Water and Wastes, Revised March 1983, latest revision.

3. EPA-600/4-82-057 Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, July 1982, latest revision.
4. Other procedures established as EPA protocol and published in the Federal Register.
5. Techniques of Water Resources Investigations of the United States Geological Survey, Laboratory Theory and Methods for Sediment Analysis, most current update.
6. EPA SW-846, Test Methods for Evaluating Solid Waste, latest edition.

Variation from procedures detailed in the above publications by the CONTRACTOR must be approved by the COUNTY. The following methods, described in the above-noted publications, shall be used for the analyses indicated unless otherwise authorized by COUNTY.

#### B. OTHER ANALYSES OF WATERS, WASTES AND SOLIDS

Occasionally COUNTY requires non-routine analyses of water and of solid materials such as sediment and soils. CONTRACTOR hereby agrees to undertake and report on such analyses in accordance with the schedule of fees attached hereto, and by reference made a part of hereof. In case of analyses for components not listed in the attached schedule of fees and in the cases of complex problems requiring the services of CONTRACTOR's personnel and laboratory equipment, CONTRACTOR agrees to undertake such assignments only on prior directions, written or oral, by an authorized representative of COUNTY at the hourly rate provided in Exhibit B, Contractor Certification and Rates. Laboratory procedures may vary depending on sample matrix and are to be determined by CONTRACTOR's senior personnel.

In addition, the COUNTY occasionally requires "rush" analyses of certain waters, wastes, and solids. "Rush" analyses of either 24 or 48 hour turn-around-time may sometimes be requested.

1. SAMPLE HOLDING TIME

Listed below are the maximum sample holding times for the most commonly requested or critical analyses. In cases where the published holding times, as shown in approved methods, are in conflict with the holding times listed herein, the lesser holding time shall take precedence. In general, all samples should be analyzed by CONTRACTOR as soon as possible after submission by COUNTY. The times listed are the maximum times that samples may be held before analysis and still considered valid. The COUNTY may request “rush” analyses under the conditions noted in Section 2 above, whereas the maximum sample holding times may not apply.

Maximum Sample Holding Time	
General Mineral Group:	
Sodium	6 Months
Potassium	6 Months
Calcium	6 Months
Magnesium	6 Months
Carbonate	6 Months
Bicarbonate	24 Months
Chloride	28 Days
Sulfate	28 Days
Nitrate	48 Days
Fluoride	28 Days
Silica	28 Days
Boron	6 Months
Total Dissolved Solids	4 Weeks
Conductivity	24 Hours
Trace Metals	6 Months
Purgeable Halocarbons	7 Days
Purgeable Aromatics	7 Days
Purgeables	7 Days
Base/Neutrals & Acids	7 Days (extraction); 40 Days (analysis)

Bacteriological Group	6 Hours
Nutrient Group	48 Hours
Rainwater Group	24 Hours
Pesticides, Herbicides, PCBs	7 Days (extraction); 40 Days (analysis)

2. METHOD DETECTION LIMITS (MDL) AND PRACTICAL QUANTITATION LIMITS (PQL)

For ALL constituents, the MDLs and PQLs shall be defined as per Title 27 of the California Code of Regulations, which defines MDLs as “meaning the lowest concentration associated with a 99% reliability of a “non-zero” analytical result,” and PQLs as “the lowest constituent concentration at which a numerical concentration can be assigned with a 99% certainty that its value is within 10% of the constituent’s actual concentration in the sample.” The MDL and PQL shall reflect the detection capabilities of the specific analytical procedure and equipment used by the laboratory. MDLs and PQLs reported by the laboratory shall NOT be simply restated from USEPA analytical method manuals. In relatively interference-free water, laboratory-derived MDLs and PQLs are expected to be not greater than published USEPA MDLs and PQLs. If CONTRACTOR suspects that, due to matrix or other effects, the detection limit for a particular analytical run differs significantly from the laboratory-derived MDL or PQL, the results should be flagged accordingly, along with an estimate of the detection limit achieved. For water analyses, in no case shall the MDL for a particular compound exceed the most recent Maximum Contaminant Level (MCL) adopted by the State of California for drinking water. For soil analyses, in no case shall the MDL for a particular compound exceed the most recent Preliminary Remediation Goal (PRG) for residential soils.

Provided below is a list of maximum acceptable MDLs for various constituents in a “clean” water matrix, i.e. those not admixed with either large quantities of organic or inorganic detritus or containing a large concentration of inorganic salts. Failure

to provide a valid justification for an MDL being exceeded will result in a 50 percent discount of the invoice for the analyses in question.

<u>Constituent</u>	<u>Maximum Acceptable Detection Limit</u>
Na, Mg, K, Ca	1.0 mg/L
SO <sub>4</sub> , Cl, NO <sub>3</sub> , HCO <sub>3</sub> , CO <sub>3</sub>	1.0 mg/L
F	0.5 mg/L
B	1.0 mg/L
NH <sub>3</sub> , TKN	0.5 mg/L
PO <sub>4</sub>	0.5 mg/L
SiO <sub>2</sub>	1.0 mg/L
Total Nonfilterable Residue	1.0 mg/L
Volatile Nonfilterable Residue	1.0 mg/L
Total Dissolved Solids	1.0 mg/L
Pb, Cr, Cu, Zn	0.020 mg/L
Fe	0.100 mg/L
Se, As	0.010 mg/L
Tl, Hg	0.002 mg/L
Oil & Grease	0.5 mg/L
Methylene Blue Active Substances (MBAS)	0.1 mg/L
PHP Group	0.5 µg/L
Total Phenols	10 µg/L
Phenol	1.0 µg/L
Extractable Organics	As specified by EPA at time of analysis
Volatile Organics	As specified by EPA at time of analysis

(See Unit Price List for individual components)

3. ANALYTICAL QUALITY CONTROL

a. INTERNAL QUALITY CONTROL

CONTRACTOR shall maintain formal internal quality assurance program, and this program must be maintained for periodic inspection by COUNTY.



b. ACCURACY

Occasionally COUNTY may prepare and submit for analysis to CONTRACTOR, without prior notification or identification as such, solutions or other materials of precisely known composition. Unsatisfactory reports, herein below defined, on the composition of such solutions or substances may be cause for cancellation of this contract by COUNTY, and/or penalty discounts of CONTRACTOR's invoices. Specifically, with respect to the dissolved species in analyses of aqueous materials, if any reported value of any analytical parameter reported by CONTRACTOR is in error by an amount greater than that listed in Paragraph D below, action will be initiated in accordance with the provisions of that paragraph.

c. PRECISION

From time to time COUNTY may submit to CONTRACTOR, without prior notification or identification as such, two or more samples of identical composition, or differing in composition by a known factor established by volumetric dilution. Unsatisfactory replicate analyses, as defined in Paragraph D, below, may be cause for cancellation of this contract by COUNTY, and/or for penalty discounts of CONTRACTOR's invoices, in accordance with the provisions of that paragraph.

d. LIMITS OF ERROR, AND PENALTIES RELATED THERETO

Limits of error for the common dissolved constituents in "clean water" samples, i.e. those not admixed with large quantities of organic or inorganic detritus nor containing a large concentration of inorganic salts, are defined in the following schedule, which shall apply to the determination of satisfactory accuracy or precision in analyses for these components:

<u>Constituent</u>	<u>Allowable Error</u>
Calcium	5% or 1.5 mg/L, whichever is greater
Magnesium	6% or 1.5 mg/L, whichever is greater
Sodium	5% or 2.0 mg/L, whichever is greater

Potassium	8% or 1.0 mg/L, whichever is greater
Chloride	5% or 1.0 mg/L, whichever is greater
Sulfate	8% or 2.0 mg/L, whichever is greater
Nitrate	8% or 1.0 mg/L, whichever is greater
Fluoride	8% or 1.0 mg/L, whichever is greater
Boron	10% or 2.0 mg/L, whichever is greater
Silica	10% or 2.0 mg/L, whichever is greater
Phosphate	10% or 2.0 mg/L, whichever is greater
Ammonia Nitrogen	10% or 1.0 mg/L, whichever is greater
Total Kjeldahl Nitrogen	15% or 1.0 mg/L, whichever is greater
Pb, Cu, Cr, Cd, Zn	10% at a detection limit of 20 µg/L or greater
Fe, Mn	8% at a detection limit of 100 µg/L or greater
Hg	25% at a detection limit of 1 µg/L or greater
Se, As	15% at a detection limit of 10 µg/L or greater
Pesticides, Herbicides	50% at a detection limit of 1 µg/L or greater
PCBs (PCP Group)	50% at a detection limit of 1 µg/L or greater
MBAS	100%
Oil & Grease	100%
Ion Balance	0.5 milliequivalents/Liter or 5% (General Mineral), whichever is greater
Extractable Organics	50% of EPA established detection limits
Volatile Organics	20% of EPA established detection limits

In the case of analytical parameters not listed above, determinations of satisfactory accuracy and/or precision may be made by COUNTY, based on information in the latest edition of “Standard Methods,” or from other reputable publications.

In the case of deviation from true values in excess of the detection limits outlined above, for samples of known composition submitted by COUNTY for accuracy quality control, COUNTY may (at its option) either:

- Notify CONTRACTOR, if COUNTY believes the error is of a random nature,  
or

- Submit to CONTRACTOR, for analysis, another sample of known composition. On the second occurrence of such excessive error within two consecutive quarters, CONTRACTOR’s invoices for one quarter shall be discounted in accordance with the following table:

<u>Average of Ratios of Errors to Allowable Errors</u>	<u>% Discount</u>
1.0 – 1.1	10
1.1 – 1.2	20
1.2 - 1.3	30
1.3 – 1.4	40
Over 1.4	50

A third consecutive quarterly occurrence of such error in accuracy shall be cause for cancellation of this Agreement by COUNTY.

In the case of samples submitted by COUNTY for replicate analyses for precision quality control deviations from the mean of reported values in excess of the error values defined above as satisfactory, in three or more instances during any one quarterly period, shall be cause for discount of CONTRACTOR’s invoice for one quarter in accordance with the schedule of discounts listed above. Occurrence of such excessive deviations in three successive quarters shall be cause for cancellation of this Agreement by COUNTY.

4. SAMPLE CONTAINERS

The CONTRACTOR shall provide the COUNTY with sample containers of adequate number, size, and type, pre-labeled, and containing preservatives, if required (sample container type shall be as specified by approved methods in accordance with section 1 of this scope of work (“Laboratory Procedures for the Analyses of Groundwater and Surface Waters”). Preparation of sample containers shall include proper cleaning and/or sterilization as specified in the appropriate methods.

Unused portions of water samples will be retained by CONTRACTOR in the containers in which they were collected for a minimum period of four weeks following transmittal of report of analysis to COUNTY in case a repeat analysis is required. Following this period of retention, the unused portion of water samples shall be discarded by CONTRACTOR at no additional cost to COUNTY.

5. COLLECTION AND DELIVERY OF SAMPLES

COUNTY agrees to collect all samples in quantities adequate for analysis, as specified in advance by CONTRACTOR. CONTRACTOR agrees to pick up samples at COUNTY's main office (300 N. Flower Street, suite 400, Santa Ana, CA 92703), at Olinda Alpha Landfill (1942 Valencia Avenue, Brea, CA 92821), at Frank R. Bowerman Landfill (11002 Bee Canyon Access Road, Irvine CA, 92602), at Coyote Canyon Landfill (20661 Newport Coast Drive, Irvine, CA 92612), at Santiago Canyon Landfill (3099 Santiago Canyon Road, Orange, CA 92869), and/or at Prima Deshecha Landfill (32250 La Pata Road, San Juan Capistrano, CA 92675), at CONTRACTOR's expense, upon request of COUNTY. CONTRACTOR shall transport and store samples in accordance with established preservation methods and procedures. CONTRACTOR is required to dispose of unused portions of samples at no additional cost to COUNTY.

6. RECORDS AND REPORTS

CONTRACTOR shall maintain a file of data sheets; data shall be filed alphanumerically under the identifying name of the sample, as assigned by COUNTY.

CONTRACTOR shall provide written reports on forms provided by or acceptable to COUNTY. COUNTY may, at its option, redesign or otherwise modify report forms by providing CONTRACTOR with a supply of such modified forms. All reports must be signed by the Laboratory Director or Senior Chemist. CONTRACTOR shall provide both hardcopy versions (with wet signature) and scanned (pdf) versions of the reports to COUNTY. CONTRACTOR shall also provide COUNTY, in electronic format (CDs or electronic mail), analytical results in the reporting format specified in Table 1 titled "Summary of Database Fields."

The format to be used shall be the universal flat file format consisting of a column-delimited spreadsheet such as Microsoft Access<sup>®</sup> 2003. Examples of file format can be provided to CONTRACTOR upon request. Modem transmittal may also be required.

CONTRACTOR shall maintain records of all GC-MS scans for inspection by COUNTY for a period of five (5) years from date of sample collection. If CONTRACTOR, in COUNTY's opinion, fails to maintain a timely schedule of analysis and reports, CONTRACTOR's bill for each overdue report will be discounted twenty percent (20%) for each **calendar week** elapsing between the due date and the receipt of a satisfactory report. This penalty shall apply to both electronic and hard-copy reports. Reports for samples designated for 24-hour analysis shall be submitted to COUNTY by facsimile or electronically by email within one (1) working day of sample delivery to the laboratory, followed with a final copy delivered to COUNTY within two (2) working days. The penalty for late submission of 24-hour results shall be twenty-five percent (25%) for the first **working day** late, with an additional twenty-five percent (25%) penalty for each successive **working day**, up to a maximum of 4 working days. If results are more than 4 working days late, COUNTY will pay no more than twenty-five percent (25%) of the regular charge for analysis. Penalties for 24-hour samples will only be assessed for General Mineral, Metal and Volatile analyses. For purposes of this paragraph, the due date of analyses and reports shall be a ten (10) working day period between sample pickup and hard copy transmittal of a full report of data, except in cases in which some other period of time is specifically agreed upon by COUNTY at the time of delivery of a sample to CONTRACTOR. The due date for electronically formatted data shall be five (5) working days. Consistent delays in the submittal of reports shall serve as a basis of termination of this contract.



**TABLE 1**  
**SUMMARY OF DATABASE FIELDS**

<b>FIELD NAME</b>	<b>DESCRIPTION</b>
<b>Site</b>	Name of landfill where sample was collected.
<b>Location</b>	Name of sampling location (i.e. well, probe, port name).
<b>Parameter</b>	This field contains the name of the chemical compound (parameter) analyzed for in the laboratory.
<b>Date Sampled</b>	Date sample was collected (written in date format).
<b>Date Numeric</b>	Date sample was collected (written in text format).
<b>Log No.</b>	Laboratory-specified sample identification number.
<b>Lab Method</b>	This field contains the laboratory method used to analyze the parameter concentration.
<b>Dup</b>	This field consists of a data qualifier which indicates whether the sample is a duplicate sample.
<b>RMOD</b>	This field consists of a data qualifier which indicates whether or not the value is a detection. A "U" in this column indicates that the result is a non-detect. A "J" in this column indicates that the result is a trace concentration. If the field is blank, the result is a detect.
<b>Result Text</b>	This field contains the results as reported from the laboratory saved as text. This text field is for reporting purposes and cannot be used for calculation purposes. Non-detects are indicated by a "less than" symbol (<) followed by the reporting limit for the analysis.
<b>Result</b>	This field contains the analytical results saved as numeric values. This field is used for calculation purposes. Non-detect values are indicated as zeroes.
<b>Units</b>	This field contains the unit of the result, detection limit, and the practical quantitation limit.
<b>Analysis Date</b>	This field contains the date the sample was analyzed by the laboratory for the particular parameter.
<b>File/Batch</b>	This field may be left blank or may be used for the laboratory's own filing purposes.
<b>PQL</b>	This field contains the practical quantitation limit for each chemical compound, as determined by the laboratory.

<b>MDL</b>	This field contains the method detection limit for each chemical compound, as determined by the laboratory.
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7. PAYMENTS

Upon receipt of satisfactory written reports of analyses and an invoice consistent with such reports, COUNTY shall pay the amounts due CONTRACTOR in accordance with the general terms and conditions of this Agreement, after deducting the value of any penalties as provided herein. The invoices shall be submitted on an ongoing basis and shall follow a format to be specified by COUNTY (EXHIBIT C). CONTRACTOR shall provide COUNTY with an invoice for a report within forty-five (45) calendar days after report has been delivered to COUNTY.

8. WARRANTY OF FEE SCHEDULE

CONTRACTOR agrees to provide timely service to COUNTY under the fee schedule set forth in this contract, unless the Agreement is terminated as provided herein.

9. TERMINATION

This Agreement may be terminated in accordance with the general terms and conditions provided in the Master Agreement.

10. PERSONNEL

CONTRACTOR will maintain competent professional and support personnel with the following minimum qualifications:

- a. Laboratory Director or Senior Chemist: Degreed in biological or physical sciences, or the equivalent, with the following criteria:
  1. Ph.D. with five years experience
  2. M.S. with ten years experience
  3. B.S. with fifteen years experience

Supervising Chemists: Graduate chemists or environmental scientists (B.S. degree) specializing in water and wastewater analysis;

- b. Microbiologist: B.S. degree, specializing in water and wastewater assays;
- c. Technicians: A.A. degree or equivalent with laboratory analyses experience;
- d. Clerical Staff: Consistently **ERROR-FREE** transcription of data.

The COUNTY shall be notified in writing by the CONTRACTOR of any changes in senior or supervisory professional staff. The CONTRACTOR shall provide the COUNTY with updated information concerning the qualifications of new personnel. In addition, CONTRACTOR shall provide COUNTY with an updated laboratory organization chart as staff changes occur.

**EXHIBIT B  
CONTRACTOR CERTIFICATION  
& RATES**

CONTRACTOR shall provide labor, materials, tools, special equipment, and permits (where applicable to accomplish task). Only the analyses shown in bold and italics may be subcontracted. Subcontractor shall meet certification requirements.

- I. The following minimum specifications shall remain in force:
  1. The CONTRACTOR and Subcontractor (if one is used) shall be certified for all required analyses by the California Department of Health Services (DOHS). The CONTRACTOR shall be a laboratory which specializes in water and wastewater analysis.
  2. The CONTRACTOR shall employ rigid internal quality control and conform to acceptable accuracy and precision standards on a day-to-day operating basis.
  3. CONTRACTOR shall submit QA\QC summary reports to OC Waste & Recycling on a monthly basis or as required by OC Waste & Recycling.
  4. CONTRACTOR shall submit EDD (also known as EDF or COELT) reports, either on CD or by electronic mail, to OC Waste & Recycling for all requested reports on a monthly basis or as required by OC Waste & Recycling. It is the CONTRACTOR's responsibility to ensure that any and all subcontractors used by CONTRACTOR have the capability to produce such reports and that they do so when such reports are requested by OC Waste & Recycling. These reports shall be provided at NO ADDITIONAL CHARGE TO COUNTY.
  5. CONTRACTOR shall submit PDFs of all individual laboratory reports to OC Waste & Recycling, at no additional charge.
  6. The CONTRACTOR shall be staffed with competent professional and support personnel with the following minimum qualifications:
    - (A) Laboratory director or Senior Chemist: Degreed in biological or physical sciences or equivalent with the following criteria:
      - (1) Ph.D. with five years of experience
      - (2) M.S. with ten years of experience
      - (3) B.S. with fifteen years of experience
  7. The CONTRACTOR's staff shall be fully and currently informed on federal, state and local water quality legislation and regulations, and perform services in accordance with procedures specified therein as required.

8. The Vendor and subcontractor (if used) shall have up-to-date equipment and instrumentation of the highest accuracy and sensitivity. All applicable EPA and/or State of California methodologies and standards (including the most current updates) shall provide a list which includes brand, model and number, and year manufactured for the following equipment/instrumentation:

- (A) Atomic Absorption Spectrophotometry
- (B) Graphite furnace
- (C) Gas Chromatography
- (D) UV-visible Spectrophotometry
- (E) Emission Spectroscopy
- (F) Flame Photography or Atomic Emission spectrophotometry
- (G) Fish Bioassay
- (H) Precision Ultra-Low Level Radioactivity Measurement
- (I) Gas Chromatography/Mass Spectroscopy  
(Alpha, Beta, Radium-226, Radon-222)
- (J) Inductively-Coupled Plasma (ICP)
- (K) Electrical Conductance Meter
- (L) pH Meter
- (M) Analytical Balance

9. COUNTY shall submit a QC sample for CONTRACTOR analysis from time to time to check accuracy and precision of analysis. QC sample will not be identified as such.

10. The CONTRACTOR shall allow unannounced inspection of facilities and operations by COUNTY personnel. CONTRACTOR shall submit proof of certification (as defined on Page 1 of Exhibit B, Contractor Certification & Rates).

11. The CONTRACTOR shall accept, on a contractual basis, analytical quality control provisions for failure to perform to stated levels of accuracy and precision.

12. The CONTRACTOR and subcontractor (if used) shall provide for on-demand sample pickup. Messengers shall be trained for sample pickup. Proof of such training is required upon County's request:

Advance notice needed for pickup: **4 hours** (preferred, but can pick up with less notice)

13. The CONTRACTOR shall be able to operate at extended hours when necessary for special projects.

14. The CONTRACTOR shall be capable of transmitting results of analysis within ten working days from sample pickup date. Date of sample pickup shall be established by the chain-of-custody record. Date of transmittal of results shall be established by return postmark, the date on which the results are received by the County shall be regarded as the transmittal date. Telephone or FAX reporting of results of analyses, within 10 working days from sample pickup, shall not be acceptable unless agreed upon by the County. All the analytical results shall also be tabulated in format approved by the County. Any and all analyses performed by subcontractors must be submitted on said subcontractor's own letterhead. Electronic format (CD) shall be provided by the vendor and shall be submitted along with the reports' hard copies.
15. The CONTRACTOR shall be capable of providing all "rush" analysis tests of certain water, waste and soils samples as required by County. "Rush" analyses of two (2) working days or less may be required.
16. The CONTRACTOR's facilities, operations, and personnel must be evaluated and accepted by Director, OC Waste & Recycling, or his/her designee.

The CONTRACTOR shall be capable of transmitting results of analysis within ten working days from sample pickup date. Date of sample pickup shall be established by the chain-of-custody record. Date of transmittal of results shall be established by return postmark.

#### UNIT PRICES FOR GROUP ANALYSES

Prices include all required supplies, freight, postage, pickup, delivery, etc.

GROUP NAME	BILLING ABBREV.	ANALYSES PERFORMED	UNIT COST PER TEST
<del>Group A</del>	<del>G-1</del>	<del>See attached list</del>	<del>145</del>
Group B	G-2	See attached list	225
Group C	G-3	See attached list	300
Group D	G-4	See attached list	500
Group E	G-5	See attached list	65
Group F	G-6	See attached list	130
Group G	G-7	See attached list	100
<del>Group H</del>	<del>G-8</del>	<del>See attached list</del>	<del>250</del>
Group I	G-9	See attached list (this group may be subcontracted)	125
Group J	G-10	See attached list (this group may be subcontracted)	100
Group K	G-11	See attached list	90
Groups L	G-12	See attached list	50
Group AI	G-13	See attached list	65

Group N	G-14	See attached list	60
Group AB	G-15	See attached list	65
Group O	G-16	See attached list	100
Group AC	G-17	See attached list	70
Group P	G-18	See attached list	100
Group AD	G-19	See attached list	90
<del>Group Q</del>	<del>G-20</del>	<del>See attached list</del>	<del>190</del>
Group R	G-21	See attached list R	40
Group AE	G-22	See attached list (this group may be subcontracted)	125
Group S	G-23	See attached list	35
Group T	G-24	See attached list	48
Group U	G-25	See attached list	60
Group AG	G-26	See attached list (this group may be subcontracted)	800
Group V	G-27	See attached list	165
Group AF	G-28	See attached list (this group may be subcontracted)	850
Group W	G-29	See attached list	80
Group AJ	G-30	See attached list	100
Group Y	G-31	See attached list	65
Group AK	G-32	See attached list (this group may be subcontracted)	85
Group AH	G-33	See attached list	110
<del>Group AL</del>	<del>G-34</del>	<del>Toxicity Testing/Fish Bioassay</del>	<del>125</del>
Group AM	G-35	EPA Method 504	40
Group AN	G-36	See attached list for Group D less Arsenic	490
Nutrient	NUT	pH, EC, Turbidity, NO <sub>2</sub> +NO <sub>3</sub> , NH <sub>3</sub> , TKN, PO <sub>4</sub> , TNFR	100
Rainwater	RAIN	pH, EC, NO <sub>2</sub> +NO <sub>3</sub> , NH <sub>3</sub> , TKN SO <sub>4</sub> , PO <sub>4</sub> , TDS, Pb, Zn, Na, Cl	110
Bacteriological	BACT	Total Coliform, Fecal Coliform, Fecal Streptococci	50
Miscellaneous	MISC	Oil & Grease, Phenol, MBAS, Sulfide, Particle Size	150

- Additional charge for a retest that may be required 40%
- Additional charge per test for rush analysis of two working days (48 hours) or as agreed by County and CONTRACTOR 25%
- Additional charge per test for rush analysis or one working day (24 hours) 50%
- Additional charge per test for rush analysis of five working days N/C

Price for analyses of components not listed in the proposed schedule of fees (per hour for technical assistants, including labor, materials, and use of equipment). \$25/hour

Note: Prices include all required supplies, freight, postage, pickup, delivery, etc.

**Compensation:**

The Contractor shall perform the tasks as set forth in Exhibit A, Scope of Work, in a cost effective manner. Compensation shall be in accordance with the rates provided herein. Total **aggregate contract amount shared between two (2) Contractors** shall not exceed **\$ 186,750** for the period 4/1/2012-2014 through 3/31/20132015. The Contractor agrees to accept the specified compensation as set forth in this Contract as full remuneration for performing all services and furnishing all staffing, labor, insurance, vehicles, equipment, tools, materials, overhead, travel, etc. 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. The Contractor shall only be compensated as set forth herein for work performed in accordance with the Scope of Work. **The County shall not pay any sum in excess of the Total Aggregate Contract Amount or Fixed Prices specified, unless authorized by amendment in accordance with Paragraphs 28 and 43 of the Contract Terms and Conditions.**

Total *Aggregate Contract Amount Shared between Two (2) Contractors Shall Not Exceed: \$186,750 per year*

**Price Increases/Decreases:** No price increases will be permitted during the Contract. All price decreases will automatically be extended to the County. The County requires bona fide proof of cost increases on Contracts prior to any price adjustment. A minimum of ninety (90) days advance notice in writing is required to secure such adjustment. No retroactive price adjustments will be considered. The County may enforce, adjust, 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.

**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.



## **Invoicing and Payment:**

The responsibility for providing an acceptable invoice rests with the Contractor. This invoice must first be verified and approved by Site PM and is subject to routine processing requirements of the County. The Contractor's invoice shall be paid after said verification and approval. It is customary for payments to be made from **45** to 60 days after receipt of valid invoice.

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

In the event of a lost or misdirected invoice, the Contractor shall re-issue at no additional charge and PM will certify it as an original. Invoices are to be submitted monthly in arrears for services provided. No billing shall cover services previously invoiced.

Contractor shall use company's letterhead to submit all invoices for goods delivered and/or services rendered. Proper references must be made to both the Task number in SOW, as well as to the Contractor's Federal I.D. or Taxation Number. Each invoice will have a unique invoice number and will include the following information:

- a. Contractor's name and address including email address
- b. Contractor's remittance address, if different from above
- c. Name of County agency/department
- d. Date of Service, Completion of Service, and duration
- e. Subcontractor Costs, if applicable
- f. 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.

Contractor may be required to include back-up consisting of:

- a. Personnel name(s)
- b. Date of visit, time spent, and the time of day
- c. Reason(s) for the visit
- d. Receipts of materials/parts procured and/or specialized equipment/tools rented
- e. Sub-Contractor's invoice(s)

An original and one copy of all invoices and support documentation are to be submitted for approval and payment to:

OC Waste & Recycling  
300 N. Flower St., Ste. 400  
Santa Ana, CA 92703-5000  
Attn: Accounts Payable

## ~~REQUIRED GROUP A ANALYSIS~~

### Analysis

~~Biochemical Oxygen Demand~~

~~Chemical Oxygen Demand~~

~~Oil & Grease (413.1)~~

~~Ortho Phosphorus~~

~~pH~~

~~Specific Conductance~~

~~Total Kjeldahl Nitrogen~~

~~Total Suspended Solids~~

~~Copper~~

~~Iron~~

~~Lead~~

~~Zinc~~

## REQUIRED GROUP B ANALYSIS

### Analysis

Alkalinity	Mercury
Bicarbonate Alkalinity	Molybdenum
Boron	Nickel
Calcium	Selenium
Carbonate Alkalinity	Silver
Carbon dioxide	Thallium
Chemical Oxygen Demand	Vanadium
Chloride	Zinc
Fluoride	EPA 8260B or equivalent (see group L)
Ion Balance	
Magnesium	
Nitrate as NO <sub>3</sub>	
pH	
Potassium	
Silica	
Sodium	
Specific Conductance	
Sulfate	
Total Dissolved Solids	
Total Hardness	
Turbidity	
Aluminum	
Antimony	
Arsenic	
Barium	
Beryllium	
Cadmium	
Chromium, total	
Cobalt	
Copper	
Iron	
Lead	
Manganese	

## REQUIRED GROUP C ANALYSIS

### Analysis

Alkalinity, total	Mercury
Bicarbonate alkalinity	Molybdenum
Boron	Nickel
Calcium	Selenium
Carbonate alkalinity	Silver
Carbon dioxide	Strontium
Chemical Oxygen Demand	Thallium
Chloride	Tin
Cyanide	Tungsten
Fluoride	Vanadium
Magnesium	Zinc
Nitrate (as NO <sub>3</sub> )	EPA method 8260 (see group P)
pH	
Potassium	
Silica	
Sodium	
Specific Conductance	
Sulfate	
Sulfide, total	
Total Dissolved Solids	
Total Hardness	
Turbidity	
Antimony	
Arsenic	
Barium	
Beryllium	
Bismuth	
Cadmium	
Chromium	
Cobalt	
Copper	
Iron	
Lead	
Manganese	

## REQUIRED GROUP D ANALYSIS

### Analysis

Antimony	1,2-Dibromo-3-chloropropane
Arsenic	1,2-Dibromoethane
Barium	Dibromomethane
Beryllium	1,2-Dichlorobenzene
Cadmium	1,3-Dichlorobenzene
Chromium	1,4-Dichlorobenzene
Cobalt	<i>trans</i> -1,4-Dichloro-2-butene
Copper	Dichlorodifluoromethane
Lead	1,1-Dichloroethane
Mercury	1,2-Dichloroethane
Nickel	1,1-Dichloroethene
Selenium	<i>cis</i> -1,2-Dichloroethene
Silver	<i>trans</i> -1,2-Dichloroethene
Thallium	1,2-Dichloropropane
Tin	1,3-Dichloropropane
Vanadium	2,2-Dichloropropane
Zinc	1,1-Dichloropropene
Cyanide	<i>cis</i> -1,3-Dichloropropene
Sulfide	<i>trans</i> -1,3-Dichloropropene
Acetone	Ethylbenzene
Acetonitrile	Ethyl methacrylate
Acrolein	Hexachlorobutadiene
Acrylonitrile	2-Hexanone
Benzene	Iodomethane
Bromochloromethane	Isobutyl alcohol
Bromodichloromethane	Methacrylonitrile
Bromoform	Methyl methacrylate
Bromomethane	Methylene chloride (Dichloromethane)
2-Butanone	4-Methyl-2-pentanone
Carbon disulfide	Naphthalene
Carbon tetrachloride	Propionitrile (Ethyl cyanide)
Chlorobenzene	Styrene
Chloroethane	1,1,1,2-Tetrachloroethane
Chloroform	1,1,2,2-Tetrachloroethane
Chloromethane	Tetrachloroethene
3-Chloropropene	Toluene
Chloroprene	1,2,4-Trichlorobenzene
Dibromochloromethane	1,1,1-Trichloroethane

## REQUIRED GROUP D ANALYSIS (CONTINUED)

### Analysis

1,1,2-Trichloroethane	Anthracene
Trichloroethene	Benzo (a) anthracene
Trichlorofluoromethane	Benzo (b) fluoranthene
1,2,3-Trichloropropane	Benzo (k) fluoranthene
Vinyl acetate	Benzo (g,h,i) perylene
Vinyl chloride	Benzo (a) pyrene
Xylenes, total	Benzyl alcohol
Aldrin	Bis (2-chloroethoxy) methane
alpha-BHC	Bis (2-chloroethyl) ether
beta-BHC	Bis (2-chloroisopropyl) ether
delta-BHC	Bis (2-ethylhexyl) phthalate
gamma-BHC (Lindane)	4-Bromophenyl phenyl ether
Chlordane	Butyl benzyl phthalate
4,4'-DDD	4-Chloroaniline
4,4'-DDE	Chlorobenzilate
4,4'-DDT	4-Chloro-3-methylphenol
Dieldrin	2-Chloronaphthalene
Endosulfan I	2-Chlorophenol
Endosulfan II	4-Chlorophenyl phenyl ether
Endosulfan sulfate	Chrysene
Endrin	2-Methylphenol
Endrin aldehyde	3-Methylphenol
Heptachlor	4-Methylphenol
Heptachlor epoxide	Diallate
Methoxychlor	Dibenzo (a,h) anthracene
PCBs	Dibenzofuran
Toxaphene	Di-n-butyl phthalate
2,4-D	3,3'-Dichlorobenzidine
2,4,5-T	2,4-Dichlorophenol
Dinoseb	2,6-Dichlorophenol
Silvex (2,4,5-TC)	Diethyl phthalate
Acenaphthene	p-(Dimethylamino)azobenzene
Acenaphthylene	Dimethioate
Acetophenone	7,12-Dimethylbenz(a)anthracene
2-Acetylaminofluorene	3,3'-Dimethylbenzidine
4-Aminobiphenyl	2,4-Dimethylphenol

## REQUIRED GROUP D ANALYSIS (CONTINUED)

### Analysis

Dimethyl phthalate	Nitrobenzene
m-Dinitrobenzene	2-Nitrophenol
4,6-Dinitro-2-methylphenol	4-Nitrophenol
2,4-Dinitrophenol	N-Nitrosodi-n-butylamine
2,4-Dinitrotoluene	N-Nitrosodiethylamine
2,6-Dinitrotoluene	N-Nitrosodimethylamine
Di-n-octyl phthalate	N-Nitrosodiphenylamine
Diphenylamine	N-Nitrosodipropylamine
Disulfoton	N-Nitrosomethylethylamine
Ethyl methanesulfonate	N-Nitrosopiperidine
Famphur	N-Nitrosopyrrolidine
Fluoranthene	5-Nitro-o-toluidine
Fluorene	Parathion
Hexachlorobenzene	Pentachlorobenzene
Hexachlorocyclopentadiene	Pentachloronitrobenzene
Hexachloroethane	Pentachlorophenol
Hexachloropropene	Phenacetin
Indeno (1,2,3-cd) pyrene	Phenanthrene
Isophorone	Phenol
Isodrin	p-Phenylenediamine
Isosafrole	Phorate
Kepone	Pronamide
Methapyrilene	Pyrene
3-Methylcholanthrene	Safrole
Methyl methanesulfonate	1,2,4,5-Tetrachlorobenzene
2-Methylnaphthalene	2,3,4,6-Tetrachlorophenol
Methyl parathion	Thionazin
Naphthalene	o-Toluidine
1,4-Naphthoquinone	1,2,4-Trichlorobenzene
1-Naphthylamine	2,4,5-Trichlorophenol
2-Naphthylamine	2,4,6-Trichlorophenol
2-Nitroaniline	0,0,0-Triethyl phosphorothioate
3-Nitroaniline	1,3,4-Trinitrobenzene
4-Nitroaniline	

## REQUIRED GROUP E ANALYSIS (EPA 608)

### Analysis

Aldrin  
 $\alpha$ -BHC  
 $\beta$ -BHC  
 $\gamma$ -BHC (Lindane)  
 $\delta$ -BHC  
Chlordane  
4,4'-DDD  
4,4'-DDE  
4,4'-DDT  
Dieldrin  
Endosulfan I  
Endosulfan II  
Endosulfan sulfate  
Endrin  
Endrin aldehyde  
Heptachlor  
Heptachlor epoxide  
Methoxychlor  
Toxaphene  
Aroclor-1016  
Aroclor-1221  
Aroclor-1232  
Aroclor-1242  
Aroclor-1248  
Aroclor-1254  
Aroclor-1260



## REQUIRED GROUP F ANALYSIS (EPA 8270C)

### Analysis

Acenaphene	2,4-Dimethylphenol
Acenaphthylene	Dimethyl phthalate
Aniline	4,6-Dinitro-2-methylphenol
Anthracene	2,4-Dinitrophenol
Azobenzene	2,4-Dinitrotoluene
Benzidine	2,6-Dinitrotoluene
Benzo (a) anthracene	Fluoranthene
Benzo (b) fluoranthene	Fluorene
Benzo (k) fluoranthene	Hexachlorobenzene
Benzo (g,h,i) perylene	Hexachlorobutadiene
Benzo (a) pyrene	Hexachlorocyclopentadiene
Benzoic acid	Hexachloroethane
Benzyl alcohol	Indeno (1,2,3-cd) pyrene
Butyl benzyl phthalate	Isophorone
Bis (2-chloroethoxy) methane	2-Methylnaphthalene
Bis (2-chloroethyl) ether	2-Methylphenol
Bis (2-chloroisopropyl) ether	3-Methylphenol
Bis (2-ethylhexyl) phthalate	4-Methylphenol
4-Bromophenyl phenyl ether	N-Nitroso-di-n-propylamine
4-Chloroaniline	N-Nitrosodimethylamine
4-Chloro-3-methylphenol	N-Nitrosodiphenylamine
2-Chloronaphthalene	Naphthalene
2-Chlorophenol	2-Nitroaniline
4-Chlorophenyl phenyl ether	3-Nitroaniline
Chrysene	4-Nitroaniline
Di-n-butyl phthalate	2-Nitrophenol
Di-n-octyl phthalate	4-Nitrophenol
Dibenzo (a,h) anthracene	Nitrobenzene
Dibenzofuran	Pentachlorophenol
1,2-Dichlorobenzene	Phenanthrene
1,3-Dichlorobenzene	Phenol
1,4-Dichlorobenzene	Pyrene
3,3'-Dichlorobenzidine	1,2,4-Trichlorobenzene
2,4-Dichlorophenol	2,4,5-Trichlorophenol
Diethyl phthalate	2,4,6-Trichlorophenol

## REQUIRED GROUP G ANALYSIS (EPA 8151A)

### Analysis

2,4-D  
2,4-DB  
2,4,5-T  
2,4,5-TC (Silvex)  
Dalapon  
Dicamba  
Dichloroprop  
Dinoseb  
MCPA  
MCP

## REQUIRED GROUP H ANALYSIS

### Analysis

Alkalinity, total	Lead
Bicarbonate alkalinity	Manganese
Boron	Mercury
Calcium	Molybdenum
Carbonate alkalinity	Nickel
Carbon dioxide	Selenium
Chemical Oxygen Demand	Silver
Chloride	Strontium
Fluoride	Thallium
Magnesium	Tin
Methylene Blue Active Substances	Tungsten
Nitrate (as NO <sub>3</sub> )	Vanadium
pH	Zinc
Phosphate (as P)	EPA 8260B (see group L)
Potassium	
Silica	
Sodium	
Specific Conductance	
Sulfate	
Total Dissolved Solids	
Total Hardness	
Turbidity	
Aluminum	
Antimony	
Arsenic	
Barium	
Beryllium	
Bismuth	
Cadmium	
Chromium	
Chromium VI	
Cobalt	
Copper	
Iron	

## REQUIRED GROUP I ANALYSIS (MODIFIED TO-15 GAS)

### Analysis

Acetone	<i>cis</i> -1,3-Dichloropropene
Benzene	<i>trans</i> -1,3-Dichloropropene
Bromobenzene	1,2-Dichloro-1,1,2,2-Tetrafluoroethane
Bromochloromethane	Ethylbenzene
Bromodichloromethane	Hexachlorobutadiene
Bromoform	2-Hexanone
Bromomethane	Isopropylbenzene
2-Butanone	4-Isopropyltoluene
n-Butylbenzene	4-Methyl-2-pentanone
<i>sec</i> -Butylbenzene	Methylene chloride
<i>tert</i> -Butylbenzene	Naphthalene
Carbon disulfide	n-Propylbenzene
Carbon tetrachloride	Styrene
Chlorobenzene	1,1,1,2-Tetrachloroethane
Chloroethane	1,1,2,2-Tetrachloroethane
Chloroform	Tetrachloroethane
Chloromethane	Toluene
2-Chlorotoluene	1,2,3-Trichlorobenzene
4-Chlorotoluene	1,2,4-Trichlorobenzene
Dibromochloromethane	1,1,1-Trichloroethane
1,2-Dibromo-3-chloropropane	1,1,2-Trichloroethane
1,2-Dibromoethane	Trichloroethene
1,2-Dichlorobenzene	Trichlorofluoromethane
1,3-Dichlorobenzene	1,1,2-Trichloro-1,2,2-trifluoroethane
1,4-Dichlorobenzene	1,2,3-Trichloropropane
Dichlorodifluoromethane	1,2,4-Trimethylbenzene
1,1-Dichloroethane	1,3,5-Trimethylbenzene
1,2-Dichloroethane	Vinyl chloride
1,1-Dichloroethene	m&p-Xylene
<i>cis</i> -1,2-Dichloroethene	o-Xylene
<i>trans</i> -1,2-Dichloroethene	
1,2-Dichloropropane	
1,3-Dichloropropane	
2,2-Dichloropropane	
1,1-Dichloropropene	

## REQUIRED GROUP J ANALYSIS (FIXED GASES AND TGNMO)

### Analysis

Methane

Oxygen

Nitrogen

Carbon Monoxide

Carbon Dioxide

TGNMO

Hydrogen sulfide

## REQUIRED GROUP K ANALYSIS (APPENDIX II METALS)

### Analysis

Antimony, total  
Arsenic, total  
Barium, total  
Beryllium, total  
Cadmium, total  
Chromium, total  
Cobalt, total  
Copper, total  
Lead, total  
Mercury, total  
Nickel, total  
Selenium, total  
Silver, total  
Thallium, total  
Tin, total  
Vanadium, total  
Zinc, total

REQUIRED GROUP L ANALYSIS (EPA 8260B as listed below)

Analysis

Benzene	Xylenes (total)
Bromochloromethane	
Bromoform	
Bromomethane	
Carbon tetrachloride	
Chlorobenzene	
Chloroethane	
2-Chloroethyl vinyl ether	
Chloroform	
Chloromethane	
Dibromochloromethane	
1,2-Dichlorobenzene	
1,3-Dichlorobenzene	
1,4-Dichlorobenzene	
Dichlorodifluoromethane	
1,1-Dichloroethane	
1,2-Dichloroethane	
1,1-Dichloroethene	
<i>trans</i> -1,2-Dichloroethene	
1,2-Dichloropropane	
1,3-Dichloropropane	
2,2-Dichloropropane	
1,1-Dichloropropene	
<i>cis</i> -1,3-Dichloropropene	
<i>trans</i> -1,3-Dichloropropene	
Ethyl benzene	
Methylene chloride	
1,1,2,2-Tetrachloroethane	
Tetrachloroethene	
Toluene	
1,1,1-Trichloroethane	
1,1,2-Trichloroethane	
Trichloroethene	
Trichlorofluoromethane	
Vinyl chloride	

## REQUIRED GROUP AI ANALYSIS (FRB LANDFILL)

### Analysis

(EPA 8260)

Acetone

Benzene

Chlorobenzene

Chloroethane

Chloromethane

1,4-Dichlorobenzene

1,1-Dichloroethane

1,2-Dichloroethane

*cis*-1,2-Dichloroethene

*trans*-1,2-Dichloroethene

1,2-Dichloropropane

Dichloromethane

Ethylbenzene

Methylene chloride

4-Methyl-2-pentanone

Naphthalene

Tetrachloroethene

Toluene

Trichloroethene

Vinyl chloride

Xylenes, total



## REQUIRED GROUP N ANALYSIS (EPA 8260B as listed below)

### Analysis

Acetone	Toluene
Benzene	1,1,1-Trichloroethane
Bromodichloromethane	1,1,2-Trichloroethane
Bromoform	Trichloroethene
Bromomethane	Trichlorofluoromethane
2-Butanone	Vinyl acetate
n-Butylbenzene	Vinyl chloride
<i>sec</i> -Butylbenzene	Xylenes, total
<i>tert</i> -Butylbenzene	
Carbon disulfide	
Carbon tetrachloride	
Chlorobenzene	
Chloroethane	
2-Chloroethyl vinyl ether	
Chloroform	
Chloromethane	
Dibromochloromethane	
1,2-Dichlorobenzene	
1,3-Dichlorobenzene	
1,4-Dichlorobenzene	
Dichlorodifluoromethane	
1,1-Dichloroethane	
1,2-Dichloroethane	
1,1-Dichloroethene	
<i>trans</i> -1,2-Dichloroethene	
1,2-Dichloropropane	
<i>cis</i> -1,3-Dichloropropene	
<i>trans</i> -1,3-Dichloropropene	
Ethylbenzene	
2-Hexanone	
Methylene chloride	
4-Methyl-2-pentanone	
Styrene	
1,1,1,2-Tetrachloroethane	
Tetrachloroethene	

## REQUIRED GROUP AB ANALYSIS (OLINDA LANDFILL)

### Analysis

(EPA 8260)

Acetone

Benzene

2-Butanone (MEK)

Carbon disulfide

Chlorobenzene

Chloroethane

Chloromethane

1,2-Dichlorobenzene

1,3-Dichlorobenzene

1,4-Dichlorobenzene

1,1-Dichloroethane

1,2-Dichloroethane

1,1-Dichloroethene

*cis*-1,2-Dichloroethene

*trans*-1,2-Dichloroethene

Ethylbenzene

Methylene chloride

4-Methyl-2-pentanone

Styrene

Tetrachloroethene

Toluene

1,1,1-Trichloroethane

Trichloroethene

Vinyl chloride

Xylenes, total

## REQUIRED GROUP O ANALYSIS (APPENDIX I VOLATILES)

### Analysis

Acetone	Methylene chloride
Acrylonitrile	Styrene
Benzene	1,1,1,2-Tetrachloroethane
Bromochloromethane	1,1,2,2-Tetrachloroethane
Bromodichloromethane	Tetrachloroethene
Bromoform	Toluene
Bromomethane	1,1,1-Trichloroethane
2-Butanone	1,1,2-Trichloroethane
Carbon disulfide	Trichloroethene
Carbon tetrachloride	Trichlorofluoromethane
Chlorobenzene	1,2,3-Trichloropropane
Chloroethane	Vinyl acetate
Chloroform	Vinyl chloride
Chloromethane	Xylenes, total
Dibromochloromethane	
Dibromomethane	
1,2-Dibromo-3-chloropropane	
1,2-Dibromoethane	
1,2-Dichlorobenzene	
1,4-Dichlorobenzene	
<i>trans</i> -1,4-Dichloro-2-butene	
1,1-Dichloroethane	
1,2-Dichloroethane	
1,1-Dichloroethene	
<i>cis</i> -1,2-Dichloroethene	
<i>trans</i> -1,2-Dichloroethene	
1,2-Dichloropropane	
<i>cis</i> -1,3-Dichloropropene	
<i>trans</i> -1,3-Dichloropropene	
Ethylbenzene	
2-Hexanone	
Iodomethane	
4-Methyl-2-pentanone	

## REQUIRED GROUP AC ANALYSIS (COYOTE CANYON LANDFILL)

### Analysis

(EPA 8260)

Acetone  
Acrylonitrile  
Benzene  
2-Butanone  
Chlorobenzene  
Chloroethane  
Chloromethane  
1,2-Dichlorobenzene  
1,3-Dichlorobenzene  
1,4-Dichlorobenzene  
1,1-Dichloroethane  
1,2-Dichloroethane  
1,1-Dichloroethene  
*cis*-1,2-Dichloroethene  
*trans*-1,2-Dichloroethene  
Ethylbenzene  
Methylene chloride  
4-Methyl-2-pentanone  
Tetrachloroethene  
Toluene  
1,1,1-Trichloroethane  
Trichloroethene  
Vinyl chloride  
Xylenes, total

## REQUIRED GROUP P ANALYSIS

### Analysis

Acetone	Iodomethane
Acrylonitrile	4-Methyl-2-pentanone
Benzene	Methylene chloride
Bromochloromethane	Styrene
Bromodichloromethane	1,1,1,2-Tetrachloroethane
Bromoform	1,1,2,2-Tetrachloroethane
Bromomethane	Tetrachloroethene
2-Butanone	Toluene
Carbon disulfide	1,1,1-Trichloroethane
Carbon tetrachloride	1,1,2-Trichloroethane
Chlorobenzene	Trichloroethene
Chloroethane	Trichlorofluoromethane
Chloroform	1,2,3-Trichloropropane
Chloromethane	Vinyl acetate
Dibromochloromethane	Vinyl chloride
Dibromomethane	Xylenes, total
1,2-Dibromo-3-chloropropane	
1,2-Dibromoethane	
1,2-Dichlorobenzene	
1,3-Dichlorobenzene	
1,4-Dichlorobenzene	
<i>trans</i> -1,4-Dichloro-2-butene	
Dichlorodifluoromethane	
1,1-Dichloroethane	
1,2-Dichloroethane	
1,1-Dichloroethene	
<i>cis</i> -1,2-Dichloroethene	
<i>trans</i> -1,2-Dichloroethene	
1,2-Dichloropropane	
<i>cis</i> -1,3-Dichloropropene	
<i>trans</i> -1,3-Dichloropropene	
Ethylbenzene	
2-Hexanone	

## REQUIRED GROUP AD ANALYSIS (SANTIAGO CANYON LANDFILL)

### Analysis

(EPA 8260)

Acetone  
Acrylonitrile  
Benzene  
2-Butanone  
Carbon tetrachloride  
Chlorobenzene  
Chloroethane  
Chloroform  
Chloromethane  
1,2-Dichlorobenzene  
1,3-Dichlorobenzene  
1,4-Dichlorobenzene  
1,1-Dichloroethane  
1,2-Dichloroethane  
1,1-Dichloroethene  
*cis*-1,2-Dichloroethene  
*trans*-1,2-Dichloroethene  
Ethylbenzene  
2-Hexanone  
Methylene chloride  
4-Methyl-2-pentanone  
Tetrachloroethene  
Toluene  
1,1,1-Trichloroethane  
Trichloroethene  
Vinyl chloride  
Xylenes, total

Analysis

~~Alkalinity, total  
Bicarbonate Alkalinity  
Boron  
Calcium  
Carbonate Alkalinity  
Chemical Oxygen Demand  
Chloride  
Fluoride  
Hydroxide  
Iron  
Magnesium  
Manganese  
Nitrate (as  $\text{NO}_3$ )  
pH  
Phenols  
Phosphate (as  $\text{PO}_4$ )  
Phosphorus, total  
Potassium  
Sodium  
Specific Conductance  
Sulfate  
Total Anions  
Total Cations  
Total Dissolved Solids  
Total Hardness  
Total Organic Carbon  
Total Organic Halogens~~

## REQUIRED GROUP R ANALYSIS

### Analysis

Chloride

Nitrate (as N)

pH

Sulfate (as SO<sub>4</sub>)

Total Dissolved Solids



## REQUIRED GROUP AE ANALYSIS

### Analysis

(EPA TO-15, additional compounds)

Acetonitrile  
Acrolein  
Acrylonitrile  
Allyl chloride  
Benzyl chloride  
1,3-Butadiene  
Cumene  
Cyclohexane  
1,4-Dioxane  
Ethanol  
Ethyl acetate  
4-Ethyltoluene  
Hexachloro-1,3-butadiene  
d-Limonene  
Methyl methacrylate  
Methyl tert-butyl ether  
n-Butyl acetate  
n-Heptane  
n-Hexane  
n-Nonane  
n-Octane  
alpha-Pinene  
2-Propanol  
Propene  
Tetrahydrofuran  
1,2,4-Trimethylbenzene  
Vinyl acetate

# REQUIRED GROUP S ANALYSIS

## Analysis

Chloride  
Nitrate (as N)  
pH

## REQUIRED GROUP T ANALYSIS

### Analysis

Cadmium  
Chromium  
Copper  
Lead  
Nickel  
Silver  
Zinc

## GROUP U ANALYSIS

### Analysis

Arsenic, total  
Barium, total  
Cadmium, total  
Chromium, total  
Cobalt, total  
Copper, total  
Iron, total  
Lead, total  
Mercury, total  
Nickel, total  
Selenium, total  
Silver, total  
Zinc, total

## GROUP AG ANALYSIS

### Analysis

Radioactivity – Gross Alpha

Radioactivity – Beta

Radium-226

Radium-226 Precision (+-)

Radium-228

Strontium-90

Thorium

Uranium

Uranium, Activity

## GROUP V ANALYSIS

### Analysis

Chloride

Nitrate (as NO<sub>3</sub>)

Sulfate

Ethane

Ethene

Methane

Total Alkalinity (Method SM2320B)

Total Organic Carbon (EPA Method 415.1)

## GROUP AF ANALYSIS

### Analysis

(EPA 8280/8290)

1,2,3,4,6,7,8-HpCDD  
1,2,3,4,6,7,8-HpCDF  
1,2,3,4,7,8,9-HpCDF  
1,2,3,4,7,8-HxCDD  
1,2,3,4,7,8-HxCDF  
1,2,3,6,7,8-HxCDD  
1,2,3,6,7,8-HxCDF  
1,2,3,7,8,9-HxCDF  
1,2,3,7,8-PeCDD  
1,2,3,7,8-PeCDF  
2,3,4,6,7,8-HxCDF  
2,3,4,7,8-PeCDF  
2,3,7,8-TCDD  
2,3,7,8-TCDF  
OCDD  
OCDF  
Total HpCDD  
Total HpCDF  
Total HxCDD  
Total HxCDF  
Total PeCDD  
Total PeCDF  
Total TCDD  
Total TCDF

## GROUP W ANALYSIS

### Analysis

Carbon dioxide

Ferrous Iron

Oxidation Reduction Potential

Dissolved Oxygen



## GROUP AJ ANALYSIS

### Analysis

Agricultural Suitability Test  
Should include the following:

Boron  
Calcium  
Chloride  
Exchangable Sodium %  
Magnesium  
pH  
Potassium  
Salinity  
Sodium

## GROUP Y ANALYSIS

### Analysis

Chloride

Nitrate as N

pH

Dissolved Oxygen

Hardness

Field Temperature

Sodium

## GROUP AK ANALYSIS (AQMD RULE 1150.1)

### Analysis

Benzene  
Benzyl chloride  
Carbon tetrachloride  
Chlorobenzene  
Chloroform  
1,2-Dibromoethane  
Dichlorobenzenes, total  
1,1-Dichloroethane  
1,2-Dichloroethane  
1,1-Dichloroethene  
Hydrogen sulfide  
Tetrachloroethene  
Toluene  
1,1,1-Trichloroethane  
Trichloroethene  
Vinyl chloride  
Xylenes, total

## GROUP AH ANALYSIS

### Analysis

EPA method 8260B (503.5 if soil)

Acetone	1,3-Dichloropropane
Allyl chloride	2,2-Dichloropropane
Benzene	1,1-Dichloropropene
Bromobenzene	cis-1,2-Dichloropropene
Bromochloromethane	trans-1,2-Dichloropropene
Bromodichloromethane	Ethylbenzene
Bromoform	Hexachlorobutadiene
Bromomethane	Isopropylbenzene
2-Butanone	4-Isopropyltoluene
n-Butylbenzene	Methylene chloride
sec-Butylbenzene	4-Methyl-2-pentanone
tert-Butylbenzene	Methyl tert-butyl ether
Carbon tetrachloride	Naphthalene
Chlorobenzene	n-Propylbenzene
Chloroethane	Styrene
2-Chloroethyl vinyl ether	1,1,1,2-Tetrachloroethane
Chloroform	1,1,2,2-Tetrachloroethane
Chloromethane	Tetrachloroethene
2-Chlorotoluene	Toluene
4-Chlorotoluene	1,2,3-Trichlorobenzene
Dibromochloromethane	1,2,4-Trichlorobenzene
1,2-Dibromo-3-chloropropane	1,1,1-Trichloroethane
1,2-Dibromoethane	1,1,2-Trichloroethane
Dibromomethane	Trichloroethene
1,2-Dichlorobenzene	Trichlorofluoromethane
1,3-Dichlorobenzene	1,1,2-Trichlorotrifluoroethane
1,4-Dichlorobenzene	1,2,4-Trimethylbenzene
cis-1,4-Dichloro-2-butene	1,3,5-Trimethylbenzene
trans-1,4-Dichloro-2-butene	Vinyl chloride
Dichlorodifluoromethane	m & p-Xylenes
1,1-Dichloroethane	o-Xylene
1,2-Dichloroethane	Xylenes, Total
1,1-Dichloroethene	
cis-1,2-Dichloroethene	
trans-1,2-Dichloroethene	
1,2-Dichloropropane	

## GROUP AP ANALYSIS

### Analysis

Chloride

Nitrate as NO<sub>3</sub>

pH

Ferrous Iron

Sulfate

Alkalinity, Total

Chloride

Total Organic Carbon

Hydrogen

Methane

Ethane

Ethene

**UNIT PRICES FOR INDIVIDUAL DETERMINATIONS****All prices must be completed; include subcontractor cost**

<b>Determination</b>	<b>Abbreviation Used for Billing</b>	<b>Unit Price</b>
Acidity	ACID	9
Alkalinity, Total	ALKA	9
Alkalinity, Bicarbonate	BICARB	9
Alkalinity, Carbonate	CARB	9
Aluminum, AA or ICP	Al	12
Ammonia, direct	NH <sub>3</sub>	15
Ammonia, distilled	NH <sub>3</sub> D	20
Antimony	Sb	12
Arsenic, AA or ICP	As	12
Arsenic, sediment	AsS	18
Asbestos	ASB	Solid 20 Water 150
Bacteria, Total Plate Count	TPC	12
Barium, AA or ICP	Ba	12
Beryllium	Be	12
Bioassay	BIO	115
Bismuth	Bi	12
B.O.D., 5-day	BOD	20
Boron	B	12
Bromide	Br	15
Cadmium, AA or ICP	Cd	12
Cadmium, sediment	CdS	18

## UNIT PRICES FOR INDIVIDUAL DETERMINATIONS

All prices must be completed; include subcontractor cost

Determination	Abbreviation Used for Billing	Unit Price
Calcium, EDTA	Ca	12
Carbon dioxide, titrimetric	CO <sub>2</sub>	15
Carbon dioxide, calculated if constituents known	CO <sub>2</sub> C	5
Chloride, mercuric nitrate method	Cl	20
Chlorine residual, DPD	ClR	18
Chlorine residual, iodimetric	ClRI	18
Chlorine demand, immediate	ClD	15
Chromium, hexavalent	Cr (VI)	15
Chromium, total, AA or ICP	Cr	12
Chromium, total, sediment	CrS	18
Cobalt	Co	12
C.O.D.	COD	18
Coliform bacteria		
Total, low-level-5 tubes	TCL	12
Total, multi-level-5 tubes, 3 dilutions	TCM	12
Fecal Coliform	FC	15
Color	COLOR	5
Conductivity	EC	5
Copper, AA or ICP	Cu	12
Copper, sediment	CuS	18
Cyanide, AgNO <sub>3</sub> titration	CN	22
Cyanide, distillation & photometry	CND	32
Cyanide, sediment	CNS	38

**UNIT PRICES FOR INDIVIDUAL DETERMINATIONS**  
**All prices must be completed; include subcontractor cost**

<b>Determination</b>	<b>Abbreviation Used for Billing</b>	<b>Unit Price</b>
Ethane	C <sub>2</sub> H <sub>6</sub>	54
Ethene	C <sub>2</sub> H <sub>4</sub>	54
Fecal streptococci	FS	18
Ferrous ion	Fe <sup>2+</sup>	38
Fluoride	F	15
Hardness, EDTA	HARD	10
Humic acid	HA	30
Hydroxide	OH	5
Iodide	I	28
Ion Balance	%	22
Iron, AA or ICP	Fe	12
Iron, sediment	FeS	18
Lead, AA or ICP	Pb	12
Lead, sediment	PbS	18
Lithium, AA or ICP	Li	12
Magnesium, AA or ICP	Mg	12
Manganese, AA or ICP	Mn	12
Methylene Blue Active Substances	MBAS	34
Mercury, AA or ICP	Hg	38
Mercury, Sediment	HgS	38
Methane	CH <sub>4</sub>	54
Molybdenum	Mo	12



**UNIT PRICES FOR INDIVIDUAL DETERMINATIONS**  
**All prices must be completed; include subcontractor cost**

<b>Determination</b>	<b>Abbreviation Used for Billing</b>	<b>Unit Price</b>
Nickel, AA or ICP	Ni	12
Nitrate	NO <sub>3</sub>	12
Nitrite	NO <sub>2</sub>	12
Nitrogen, total Kjeldahl (Ammonia & Organic total)	TKN	28
Odor	ODOR	5
Oil & Grease, Soxhlet	OGSEX	30
Oxidation Reduction Potential	ORP	22
Oxygen, dissolved	DO	18
Organic Acids, GLC	ORGA	90
Perchlorate	ClO <sub>4</sub>	25
pH	pH	5
pH, sediment	pHS	12
Particle sizes, pipette method (including % sand, % silt, and % clay)	PSIZE	40
Phenols	POH	35
Phosphate, ortho	PO <sub>4</sub> O	20
Phosphate, total	PO <sub>4</sub>	20
Phosphate, sediment	PO <sub>4</sub> S	20
Phosphorus, ortho	OP	20
Phosphorus, total	P	20
Potassium	K	12

**UNIT PRICES FOR INDIVIDUAL DETERMINATIONS**  
**All prices must be completed; include subcontractor cost**

<b>Determination</b>	<b>Abbreviation Used for Billing</b>	<b>Unit Price</b>
Residue:		
Total nonfilterable	TNFR	10
Total filterable, dried at 180°C	TFR8	10
Total filterable, dried at 103-105°C	TRR5	10
Total volatile	TVR	20
Selenium, AA or ICP	Se	12
Selenium, sediment	SeS	18
Silica	SiO <sub>2</sub>	18
Silver, AA or ICP	Ag	12
Sodium	Na	12
Strontium	Sr	12
Sulfate	SO <sub>4</sub>	12
Sulfide, dissolved	SD	20
Sulfide, total	ST	15
Sulfite	SO <sub>3</sub>	40
Sulfur, total	S	40
Sulfur, total (sediment)	STS	40
Tannin & Lignin	TL	40
Taste	TASTE	5
Temperature, degrees Celsius	°C	N/C
Thallium	Tl	12
Tin, AA or ICP	Sn	12

**UNIT PRICES FOR INDIVIDUAL DETERMINATIONS**  
**All prices must be completed; include subcontractor cost**

<b>Determination</b>	<b>Abbreviation Used for Billing</b>	<b>Unit Price</b>
Tin, sediment	SnS	18
Tungsten	W	12
Total Organic Carbon	TOC	38
Total Organic Halogens	TOX	70
Total Anions	TAn	33
Total Cations	TCat	33
Total Recoverable Petroleum Hydrocarbons	TRPH	50
Total Petroleum Hydrocarbons	TPH	Gas 25 Diesel 38
TCDD, quantitative	TCDDQ	500
TCDD, screened	TCDDS	175
Turbidity	TURB	10
Vanadium	V	12
Zinc, AA or ICP	Zn	12
Zinc, sediment	ZnS	18
Strontium-90	Sr-90	145
Gross Alpha and Beta	GAB	40
Beta, millirem	Bmr	30
Uranium, total	U	65
Uranium, Activity	UACT	90
Tritium	<sup>3</sup> H	60
Radium-226	Ra-226	100

**UNIT PRICES FOR INDIVIDUAL DETERMINATIONS**

**All prices must be completed; include subcontractor cost**

<b>Determination</b>	<b>Abbreviation Used for Billing</b>	<b>Unit Price</b>
Radium-226 Precision (+-)	Ra-226P	120
Radium-228	Ra-228	145

**EXHIBIT C**

**FORMAT FOR ANALYTICAL SERVICES BILLINGS**

**(CONTRACTOR LETTERHEAD)**

Bill to: County of Orange  
OC Waste & Recycling  
Department Contractor  
300 N. Flower Street, Suite 400  
Santa Ana, CA 92703

Date \_\_\_\_\_  
County MA No. \_\_\_\_\_  
Invoice No. \_\_\_\_\_  
Name: \_\_\_\_\_  
Sample Lab No. \_\_\_\_\_

<u>CONTRACTOR</u> <u>LAB NUMBER</u>	<u>SAMPLE</u> <u>NUMBER</u>	<u>ANALYSES</u> <u>PERFORMED</u>	<u>UNIT</u> <u>COST</u>	<u>TOTAL</u> <u>COST</u>
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Example:

06-01-001	06-04-055	G21	\$50.00	\$200.00
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These abbreviations under “analyses performed” are to be taken from the attached unit price list and/or group list of approved analyses. All other analyses are to be billed per contract hour. When billing per contract hour, list hourly rate and amount of time spent.