BOS Agreement No.	
DOT Agreement No.	110120

# COUNTY OF MENDOCINO STANDARD SERVICES AGREEMENT FOR LANDFILL WATER AND GAS MONITORING LABORATORY TESTING

This Agreement, dated as of	, 2012, is by and between the
COUNTY OF MENDOCINO,	hereinafter referred to as the "COUNTY", and Alpha
Analytical Laboratories, Inc.,	hereinafter referred to as the "CONSULTANT".

#### **WITNESSETH**

WHEREAS, pursuant to Government Code Section 31000, COUNTY may retain independent CONSULTANTs to perform special services to or for COUNTY or any department thereof; and,

WHEREAS, COUNTY desires to obtain CONSULTANT to Perform Landfill Water and Gas Laboratory Testing Services, Mendocino County closed Landfill located in Gualala, Laytonville and Caspar California, a requirement by the Cal Recycle and the State of California State Water Resources Control Board (SWQCB); and,

WHEREAS, CONSULTANT is willing to provide such services on the terms and conditions set forth in this AGREEMENT and is willing to provide same to COUNTY.

NOW, THEREFORE it is agreed that COUNTY does hereby retain CONSULTANT to provide the services described in Exhibit "A", and CONSULTANT accepts such engagement, on the General Terms and Conditions hereinafter specified in this Agreement, the Additional Provisions attached hereto, and the following described exhibits, all of which are incorporated into this Agreement by this reference:

Exhibit A Definition of Services
Exhibit B Payment Terms

Exhibit C Insurance Requirements

The term of this Agreement shall be from January 24, 2012 through December 31, 2016.

The compensation payable to CONSULTANT hereunder shall not exceed four hundred thirty thousand six hundred eighty dollars (\$430,680) for the term of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

DEPARTMENT OF TRANSPORTATION FISCAL REVIEW:	Alpha Analytical Laboratories, Inc.				
	Bv.				
HOWARD N. DASHIELL DATE	By: Robert A. Phillips DATE				
Budgeted: ⊠ Yes ☐ No	Owner/Vice President				
Budget Unit: 4511	NAME AND ADDRESS OF CONTRACTOR:				
Line Item: 86-2184					
Grant: ⊠ Yes □ No	Alpha Analytical Laboratories, Inc. 208 Mason Street				
Grant No.: Landfill Closure Fund	Ukiah, Ca 95482				
COUNTY OF MENDOCINO  By:	By signing above, signatory warrants and represents that he/she executed this Agreement in his/her authorized capacity and that by his/her signature on this Agreement,				
JOHN MCCOWEN, Chair BOARD OF SUPERVISORS	he/she or the entity upon behalf of which he/she acted, executed this Agreement				
ATTEST:	COUNTY COUNSEL REVIEW:				
CARMEL J. ANGELO, Clerk of said Board	APPROVED AS TO FORM:				
By: Deputy	JEANINE B. NADEL, County Counsel				
Deputy	JEANINE B. NADEL, County Courses				
I hereby certify that according to the provisions of Government Code Section 25103, delivery of this document has been made.	By:				
CARMEL J. ANGELO, Clerk of said Board					
By:					
By: Deputy					
INSURANCE REVIEW: RISK MANAGER	FISCAL REVIEW:				
NON WANAGEN	By: Deputy CEO/Fiscal				
By: KRISTIN McMENOMEY, Director General Services Agency	Deputy CEO/Fiscal				
EXECUTIVE OFFICE REVIEW:					
APPROVAL RECOMMENDED					
By:					
By:CARMEL J. ANGELO, Chief Executive Officer					
Signatory Authority: \$0-25,000 Department; \$25,001-50,000 Pu	rchasing Agent; \$50,001+ Board of Supervisors				

#### **GENERAL TERMS AND CONDITIONS**

 INDEPENDENT CONSULTANT: No relationship of employer and employee is created by this Agreement; it being understood and agreed that CONSULTANT is an Independent CONSULTANT. CONSULTANT is not the agent or employee of the COUNTY in any capacity whatsoever, and COUNTY shall not be liable for any acts or omissions by CONSULTANT nor for any obligations or liabilities incurred by CONSULTANT.

CONSULTANT shall have no claim under this Agreement or otherwise, for seniority, vacation time, vacation pay, sick leave, personal time off, overtime, health insurance medical care, hospital care, retirement benefits, social security, disability, Workers' Compensation, or unemployment insurance benefits, civil service protection, or employee benefits of any kind.

CONSULTANT shall be solely liable for and obligated to pay directly all applicable payroll taxes (including federal and state income taxes) or contributions for unemployment insurance or old age pensions or annuities which are imposed by any governmental entity in connection with the labor used or which are measured by wages, salaries or other remuneration paid to its officers, agents or employees and agrees to indemnify and hold County harmless from any and all liability which COUNTY may incur because of CONSULTANT's failure to pay such amounts.

In carrying out the work contemplated herein, CONSULTANT shall comply with all applicable federal and state workers' compensation and liability laws and regulations with respect to the officers, agents and/or employees conducting and participating in the work; and agrees that such officers, agents, and/or employees will be considered as Independent Consultants and shall not be treated or considered in any way as officers, agents and/or employees of COUNTY.

CONSULTANT does, by this Agreement, agree to perform his/her said work and functions at all times in strict accordance with all applicable federal, state and County laws, including but not limited to prevailing wage laws, ordinances, regulations, titles, departmental procedures and currently approved methods and practices in his/her field consistent with the standard of care and that the sole interest of COUNTY is to ensure that said service shall be performed and rendered in a competent, efficient, timely and satisfactory manner and in accordance with the standards required by the County agency concerned

Notwithstanding the foregoing, if the COUNTY determines that pursuant to state and federal law CONSULTANT is an employee for purposes of income tax withholding, COUNTY may upon two (2) week's written notice to CONSULTANT, withhold from payments to CONSULTANT hereunder federal and state income taxes and pay said sums to the federal and state governments.

2. INDEMNIFICATION: CONSULTANT shall indemnify, defend, and hold harmless the COUNTY, its officers, agents, and employees, from and against any and all

claims, liabilities, and losses whatsoever including damages to property and injuries to, or death of persons, reasonable attorney's fees, expert fees and court costs occurring or resulting, or alleged to be occurring or resulting, to any and all persons, firms or corporations furnishing or supplying work, services, materials, or supplies in connections with the CONSULTANT'S performance or its obligations under this AGREEMENT, and from any and all claims, liabilities, and losses occurring or resulting, or alleged to be occurring or resulting, to any person, firm, or corporation for damage, injury, or death arising out of or connected with the CONSULTANT'S performance of its obligations under this AGREEMENT, unless such claims, liabilities, or losses arise out of the sole negligence or willful misconduct of COUNTY. "CONSULTANT'S performance" includes CONSULTANT'S action or inaction and the action or inaction of CONSULTANT'S officers, employees, agents and subconsultants.

- 3. INSURANCE AND BOND: CONSULTANT shall at all times during the term of the Agreement with the COUNTY maintain in force those insurance policies and bonds as designated in the attached Exhibit C, and will comply with all those requirements as stated therein.
- 4. WORKERS' COMPENSATION: CONSULTANT shall provide Workers' Compensation insurance, as applicable, at CONSULTANT's own cost and expense and further, neither the CONSULTANT nor its carrier shall be entitled to recover from COUNTY any costs, settlements, or expenses of Workers' Compensation claims arising out of this Agreement.

#### 5. CONFORMITY WITH LAW AND SAFETY:

- a. In performing services under this Agreement, in CONSULTANT'S best judgment CONSULTANT shall observe and comply with all applicable laws, ordinances, codes and regulations of governmental agencies, including federal, state, municipal, and local governing bodies, having jurisdiction over the scope of services, including all applicable provisions of the California Occupational Safety and Health Act. CONSULTANT shall indemnify and hold COUNTY harmless from any and all liability, fines, penalties and consequences from any of CONSULTANT's failures to comply with such laws, ordinances, codes and regulations when outside the standard of care.
- b. Accidents: If a death, serious personal injury or substantial property damage occurs to the extent arising out of CONSULTANT's performance of this Agreement, CONSULTANT shall immediately notify Mendocino County Risk Manager's Office by telephone. CONSULTANT shall promptly submit to COUNTY a written report, in such form as may be required by COUNTY of all accidents which occur in connection with this Agreement. This report must include the following information: (1) name and address of the injured or deceased person(s); (2) name and address of CONSULTANT's subconsultants, if any; (3) name and address of CONSULTANT's liability insurance carrier; and (4) a detailed description of the accident and whether any of COUNTY's equipment, tools, material, or staff were involved.

- c. CONSULTANT further agrees to take all reasonable steps to preserve all physical evidence and information which may be relevant to the circumstances surrounding a potential claim, while maintaining public safety, and to grant to the COUNTY the opportunity to review and inspect such evidence, including the scene of the accident.
- 6. PAYMENT: For services performed in accordance with this Agreement, payment shall be made to CONSULTANT as provided in Exhibit "B" hereto as funding permits.
- 7. TAXES: Payment of all applicable federal, state, and local taxes shall be the sole responsibility of the CONSULTANT.
- 8. OWNERSHIP OF DOCUMENTS: CONSULTANT hereby agrees to provide to a private, not-for-profit, successor and if there is none then assigns the COUNTY and its assignees all copyright and other use rights in any and all proposals, plans, specification, designs, drawings, sketches, renderings, models, reports and related documents (including computerized or electronic copies) respecting in any way the subject matter of this Agreement, whether prepared by the COUNTY, the CONSULTANT, the CONSULTANT's subconsultants or third parties at the request of the CONSULTANT (collectively, "Documents and Materials"). This explicitly includes the electronic copies of all above stated documentation.
- CONSULTANT shall be permitted to retain copies, including reproducible copies and computerized copies, of said Documents and Materials. CONSULTANT agrees to take such further steps as may be reasonably requested by COUNTY to implement the aforesaid assignment. If for any reason said assignment is not effective, CONSULTANT hereby grants the COUNTY and any assignee of the COUNTY an express royalty free license to retain and use said Documents and Materials. The COUNTY's rights under this paragraph shall apply regardless of the degree of completion of the Documents and Materials and whether or not CONSULTANT's services as set forth in Exhibit "A" of this Agreement have been fully performed. The COUNTY shall indemnify the consultant for alteration or reuse of documents and materials prepared as part of this agreement without written authorization from the consultant.
- CONSULTANT shall pay all royalties and license fees which may be due for any patented or copyrighted materials, methods or systems selected by the CONSULTANT and incorporated into the work as set forth in Exhibit "A", and shall defend, indemnify and hold the COUNTY harmless from any claims for infringement of patent or copyright arising out of such selection.

The COUNTY's rights under this Paragraph 8 shall not extend to any computer software used to create such Documents and Materials.

- 9. CONFLICT OF INTEREST: The CONSULTANT covenants that it presently has no interest, and shall not have any interest, direct or indirect, which would conflict in any manner with the performance of services required under this Agreement.
- 10. NOTICES: All notices, requests, demands, or other communications under this Agreement shall be in writing. Notices shall be given for all purposes as follows:

Personal delivery: When personally delivered to the recipient, notices are effective on delivery.

First Class Mail: When mailed first class to the last address of the recipient known to the party giving notice, notice is effective three (3) mail delivery days after deposit in a United States Postal Service office or mailbox. Certified Mail: When mailed certified mail, return receipt requested, notice is effective on receipt, if delivery is confirmed by a return receipt.

Overnight Delivery: When delivered by overnight delivery (Federal Express/Airborne/United Parcel Service/DHL WorldWide Express) with charges prepaid or charged to the sender's account, notice is effective on delivery, if delivery is confirmed by the delivery service.

Facsimile transmission: When sent by facsimile to the facsimile number of the recipient known to the party giving notice, notice is effective on receipt, provided that, (a) a duplicate copy of the notice is promptly given by first-class or certified mail or by overnight delivery, or (b) the receiving party delivers a written confirmation of receipt. Any notice given facsimile shall be deemed received on the next business day if it is received after 5:00 p.m. (recipient's time) or on a non-business day.

Addresses for purpose of giving notice are as follows:

To COUNTY: MENDOCINO COUNTY DEPARTMENT OF TRANSPORTATION

340 Lake Mendocino Drive

Ukiah, CA 95482

Attn: Howard N. Dashiell, Director of Transportation

To CONSULTANT: Alpha Analytical Laboratories, Inc.

208 Mason Street Ukiah, Ca 95482

ATTN: Karen Daly, Administrative Officer

Any correctly addressed notice that is refused, unclaimed, or undeliverable because of an act or omission of the party to be notified shall be deemed effective as of the first date that said notice was refused, unclaimed, or deemed undeliverable by the postal authorities, messenger, or overnight delivery service.

Any party may change its address or facsimile number by giving the other party notice of the change in any manner permitted by this Agreement.

- 11. USE OF COUNTY PROPERTY: CONSULTANT shall not use County property (including equipment, instruments and supplies) or personnel for any purpose other than in the performance of his/her obligations under this Agreement.
- 12. EQUAL EMPLOYMENT OPPORTUNITY PRACTICES PROVISIONS: CONSULTANT certifies that it will comply with all federal and state laws pertaining to equal employment opportunity and that it shall not discriminate against any employee or applicant for employment on the basis of race, color, religion, age, sex, national origin, ancestry, marital status, political affiliation or physical or mental condition, in matters pertaining to recruitment, hiring, training, upgrading, transfer, compensation or termination.
- a. CONSULTANT shall, in all solicitations or advertisements for applicants for employment placed as a result of this Agreement, state that it is an "Equal Opportunity Employer" or that all qualified applicants will receive consideration for employment without regard to their race, creed, color, disability, sex, sexual orientation, national origin, age, religion, Vietnam era Veteran's status, political affiliation, or any other non-merit factor.
- b. CONSULTANT shall, if requested to so do by the COUNTY, certify that it has not, in the performance of this Agreement, discriminated against applicants or employees because of their race, creed, color, disability, sex, sexual orientation, national origin, age, religion, Vietnam era Veteran's status, political affiliation, or any other non-merit factor.
- c. If requested to do so by the COUNTY, CONSULTANT shall provide the COUNTY with access to copies of all of its records pertaining or relating to its employment practices, except to the extent such records or portions of such records are confidential or privileged under state or federal law.
- d. Nothing contained in this Agreement shall be construed in any manner so as to require or permit any act which is prohibited by law.
- e. The CONSULTANT shall include the provisions set forth in paragraphs a through d (above) in each of its subcontracts.
- 13. DRUG-FREE WORKPLACE: CONSULTANT and CONSULTANT's employees shall comply with the COUNTY's policy of maintaining a drug-free workplace. Neither CONSULTANT nor CONSULTANT's employees shall unlawfully manufacture, distribute, dispense, possess or use controlled substances, as defined in 21 U.S. Code § 812, including, but not limited to, marijuana, heroin, cocaine, and amphetamines, at any COUNTY facility or work site. If CONSULTANT or any employee of CONSULTANT is convicted or pleads *nolo contendere* to a criminal drug statute violation occurring at a County facility or work site, the CONSULTANT, within five days thereafter, shall notify the head of the County department/agency for which the contract services are performed. Violation of this provision shall constitute a material breach of this Agreement.

- 14. ENERGY CONSERVATION: CONSULTANT agrees to comply with the mandatory standards and policies relating to energy efficiency in the State of California Energy Conservation Plan, (Title 24, California Administrative Code).
- 15. COMPLIANCE WITH LICENSING REQUIREMENTS: CONSULTANT shall comply with all necessary licensing requirements and shall obtain appropriate licenses and display the same in a location that is reasonably conspicuous, as well as file copies of same with the County Executive Office.
- 16. AUDITS; ACCESS TO RECORDS: The CONSULTANT shall make available to the COUNTY, its authorized agents, officers, or employees, for examination any and all ledgers, books of accounts, invoices, vouchers, cancelled checks, and other records or documents evidencing or relating to the expenditures and disbursements charged to the COUNTY, and shall furnish to the COUNTY, within sixty (60) days after examination, its authorized agents, officers or employees such other evidence or information as the COUNTY may require with regard to any such expenditure or disbursement charged by the CONSULTANT.
- The CONSULTANT shall maintain full and adequate records in accordance with County requirements to show the actual costs incurred by the CONSULTANT in the performance of this Agreement. If such books and records are not kept and maintained by CONSULTANT within the County of Mendocino, California, CONSULTANT shall, upon request of the COUNTY, make such books and records available to the COUNTY for inspection at a location within County or CONSULTANT shall pay to the COUNTY the reasonable, and necessary costs incurred by the COUNTY in inspecting CONSULTANT's books and records, including, but not limited to, travel, lodging and subsistence costs. CONSULTANT shall provide such assistance as may be reasonably required in the course of such inspection. The COUNTY further reserves the right to examine and reexamine said books, records and data during the four (4) year period following termination of this Agreement or completion of all work hereunder, as evidenced in writing by the COUNTY, and the CONSULTANT shall in no event dispose of, destroy, alter, or mutilate said books, records, accounts, and data in any manner whatsoever for four (4) years after the COUNTY makes the final or last payment or within four (4) years after any pending issues between the COUNTY and CONSULTANT with respect to this Agreement are closed, whichever is later.
- 17. DOCUMENTS AND MATERIALS: CONSULTANT shall maintain and make available to COUNTY for its inspection and use during the term of this Agreement, all Documents and Materials, as defined in Paragraph 8 of this Agreement. CONSULTANT's obligations under the preceding sentence shall continue for four (4) years following termination or expiration of this Agreement or the completion of all work hereunder (as evidenced in writing by COUNTY), and CONSULTANT shall in no event dispose of, destroy, alter or mutilate said Documents and Materials, for four (4) years following the COUNTY's last payment to CONSULTANT under this Agreement.

- 18. TIME OF ESSENCE: Time is of the essence in respect to all provisions of this Agreement that specify a time for performance; provided, however, that the foregoing shall not be construed to limit or deprive a party of the benefits of any grace or use period allowed in this Agreement.
- 19. TERMINATION: The COUNTY has and reserves the right to suspend, terminate or abandon the execution of any work by the CONSULTANT without cause at any time upon giving to the CONSULTANT prior written notice. In the event that the COUNTY should abandon, terminate or suspend the CONSULTANT's work, the CONSULTANT shall be entitled to payment for services provided hereunder prior to the effective date of said suspension, termination or abandonment. Said payment shall be computed in accordance with Exhibit B hereto, provided that the maximum amount payable to CONSULTANT for its Final Landfill Closure Services shall not exceed \$430,680 payment for services provided hereunder prior to the effective date of said suspension, termination or abandonment or lack of funding.
- 20. NON APPROPRIATION: If COUNTY should not appropriate or otherwise make available funds sufficient to purchase, lease, operate or maintain the products set forth in this Agreement, or other means of performing the same functions of such products, COUNTY may unilaterally terminate this Agreement only upon thirty (30) days written notice to CONSULTANT. Upon termination, COUNTY shall remit payment for all products and services delivered to COUNTY and all expenses incurred by CONSULTANT prior to CONSULTANT'S receipt of the termination notice.
- 21. CHOICE OF LAW: This Agreement, and any dispute arising from the relationship between the parties to this Agreement, shall be governed by the laws of the State of California, excluding any laws that direct the application of another jurisdiction's laws.
- 22. WAIVER: No waiver of a breach, failure of any condition, or any right or remedy contained in or granted by the provisions of this Agreement shall be effective unless it is in writing and signed by the party waiving the breach, failure, right or remedy. No waiver of any breach, failure, right or remedy shall be deemed a waiver of any other breach, failure, right or remedy, whether or not similar, nor shall any waiver constitute a continuing waiver unless the writing so specifies.
- 23. ADVERTISING OR PUBLICITY: CONSULTANT shall not use the name of County, its officers, directors, employees or agents, in advertising or publicity releases or otherwise without securing the prior written consent of COUNTY in each instance.
- 24. ENTIRE AGREEMENT: This Agreement, including all attachments, exhibits, and any other documents specifically incorporated into this Agreement, shall constitute the entire agreement between COUNTY and CONSULTANT relating to the subject matter of this Agreement. As used herein, Agreement refers to and includes any documents incorporated herein by reference and any exhibits or attachments. This Agreement supersedes and merges all previous understandings, and all other agreements, written or oral, between the parties and sets forth the entire

- understanding of the parties regarding the subject matter thereof. This Agreement may not be modified except by a written document signed by both parties.
- 25. HEADINGS: Herein are for convenience of reference only and shall in no way affect interpretation of this Agreement.
- 26. MODIFICATION OF AGREEMENT: This Agreement may be supplemented, amended or modified only by the mutual agreement of the parties. No supplement, amendment or modification of this Agreement shall be binding unless it is in writing and signed by authorized representatives of both parties.
- 27. ASSURANCE OF PERFORMANCE: If at any time the COUNTY has good objective cause to believe CONSULTANT may not be adequately performing its obligations under this Agreement or that CONSULTANT may fail to complete the Services as required by this Agreement, COUNTY may request from CONSULTANT prompt written assurances of performance and a written plan acceptable to COUNTY, to correct the observed deficiencies in CONSULTANT's performance. CONSULTANT shall provide such written assurances and written plan within thirty (30) calendar days of its receipt of COUNTY's request and shall thereafter diligently commence and fully perform such written plan. CONSULTANT acknowledges and agrees that any failure to provide such written assurances and written plan within the required time is a material breach under this Agreement.
- 28. SUBCONTRACTING/ASSIGNMENT: CONSULTANT shall not subcontract, assign or delegate any portion of this Agreement or any duties or obligations hereunder without the COUNTY's prior written approval.
- a. Neither party shall, on the basis of this Agreement, contract on behalf of or in the name of the other party. Any agreement that violates this Section shall confer no rights on any party and shall be null and void.
- b. CONSULTANT shall use subconsultants identified in Exhibit "A" and shall not substitute subconsultants without COUNTY's prior written approval.
- c. CONSULTANT shall remain fully responsible for compliance by its subconsultants with all the terms of this Agreement, regardless of the terms of any agreement between CONSULTANT and its subconsultants.
- 29. SURVIVAL: The obligations of this Agreement, which by their nature would continue beyond the termination on expiration of the Agreement, including without limitation, the obligations regarding Indemnification (Paragraph 2), Ownership of Documents (Paragraph 8), and Conflict of Interest (Paragraph 9), shall survive termination or expiration for two (2) years.

- 30. SEVERABILITY: If a court of competent jurisdiction holds any provision of this Agreement to be illegal, unenforceable, or invalid in whole or in part for any reason, the validity and enforceability of the remaining provisions, or portions of them, will not be affected, unless an essential purpose of this Agreement would be defeated by the loss of the illegal, unenforceable, or invalid provision.
- 31. PATENT AND COPYRIGHT INDEMNITY: CONSULTANT represents that it knows of no allegations, claims, or threatened claims that the materials, services, hardware or software ("CONSULTANT Products") provided to COUNTY under this Agreement infringe any patent, copyright or other proprietary right. CONSULTANT shall defend, indemnify and hold harmless COUNTY of, from and against all losses, claims, damages, liabilities, costs expenses and amounts (collectively, "Losses") arising out of or in connection when determined by a count of competent jurisdiction to be true that any CONSULTANT Products or the use thereof, infringe any patent, copyright or other proprietary right of any third party.
- a. COUNTY will: (1) notify CONSULTANT promptly of such claim, suit or assertion; (2) permit CONSULTANT to defend, compromise, or settle the claim; and, (3) provide, on a reasonable basis, information to enable CONSULTANT to do so. CONSULTANT shall not agree without COUNTY's prior written consent, to any settlement, which would require COUNTY to pay money or perform some affirmative act in order to continue using the CONSULTANT Products.
- b. If CONSULTANT is obligated to defend COUNTY pursuant to this Section 31 and fails to do so after reasonable notice from COUNTY, COUNTY may defend itself and/or settle such proceeding, and CONSULTANT shall pay to COUNTY any and all losses, damages and expenses (including attorney's fees and costs) incurred in relationship with COUNTY's defense and/or settlement of such proceeding to the extent CONSULTANT is determed culpable by a court of competent jurisdiction.
- c. In the case of any such claim of infringement, CONSULTANT shall either, at its option, (1) procure for COUNTY the right to continue using the CONSULTANT Products; or (2) replace or modify the CONSULTANT Products so that that they become non-infringing, but equivalent in functionality and performance.
- d. Notwithstanding this Section 31, COUNTY retains the right and ability to defend itself, at its own expense, against any claims that CONSULTANT Products infringe any patent, copyright, or other intellectual property right.
  - 32. OTHER AGENCIES: Other tax supported agencies within the State of California who have not contracted for their own requirements may desire to participate in this contract. The CONSULTANT is requested to service these agencies and will be given the opportunity to accept or reject the additional requirements. If the CONSULTANT elects to supply other agencies, orders will be placed directly by the agency and payments made directly by the agency.

#### **EXHIBIT A**

#### **DEFINITION OF SERVICES**

#### FOR LANDFILL WATER AND GAS MONITORING LABORATORY TESTING

CONSULTANT will provide the professional laboratory testing services for the South Coast, Laytonville and Caspar Landfills Monitoring Programs. The general types of tests to be preformed pursuant to State Water Quality Control Board (SWQCB) requirements are as follows:

### **Analytical Method Details**

Alpha Analytical Laboratories, Inc. Method Analyte MDL MRL Units Field Analyses

in Water

SM4500-H+ B pH 1.000 pH Units

Metals (Drinking Water) by EPA 200 Series Methods

in Water

EPA 200.7 Calcium 0.030 1.0 mg/l

EPA 200.7 Magnesium 0.030 1.0 mg/l

EPA 200.7 Potassium 0.010 1.0 mg/l

EPA 200.7 Sodium 0.020 1.0 mg/l

#### Metals by EPA 200 Series Methods

in Water

EPA 200.7 Aluminum 0.010 0.050 mg/l

EPA 200.7 Copper 0.0040 0.020 mg/l

EPA 200.7 Iron 0.010 0.10 mg/l

EPA 200.7 Manganese 0.00070 0.020 mg/l

EPA 200.7 Zinc 0.00080 0.020 mg/l

EPA 200.9 Lead 0.00080 0.0050 mg/l

### Metals by EPA 6000/7000 Series Methods

in Water

EPA 6010 Aluminum 0.010 0.050 mg/l

EPA 6010 Antimony 0.0050 0.020 mg/l

EPA 6010 Barium 0.00050 0.010 mg/l

EPA 6010 Beryllium 0.00020 0.010 mg/l

EPA 6010 Boron 0.010 0.10 mg/l

EPA 6010 Cadmium 0.00050 0.010 mg/l

EPA 6010 Calcium 0.030 1.0 mg/l

EPA 6010 Chromium 0.0010 0.050 mg/l

EPA 6010 Cobalt 0.0030 0.020 mg/l EPA 6010 Copper 0.0040 0.10 mg/l

EPA 6010 Iron 0.010 0.10 mg/l

EPA 6010 Lead 0.0020 0.050 mg/l

EPA 6010 Magnesium 0.020 1.0 mg/l EPA 6010 Manganese 0.00070 0.050 mg/l

EPA 6010 Molybdenum 0.0010 0.50 mg/l

EPA 6010 Nickel 0.0030 0.10 mg/l

EPA 6010 Potassium 0.010 1.0 mg/l

EPA 6010 Silver 0.0020 0.010 mg/l

EPA 6010 Sodium 0.020 1.0 mg/l

EPA 6010 Thallium 0.010 0.40 mg/l

EPA 6010 Titanium 0.0010 0.50 mg/l

EPA 6010 Tin 0.0060 0.50 mg/l

EPA 6010 Vanadium 0.0010 0.50 mg/l

EPA 6010 Zinc 0.0050 0.10 mg/l

EPA 7060 Arsenic 0.00070 0.0020 mg/l

EPA 7421 Lead 0.00080 0.0050 mg/l

EPA 7470 Mercury 0.00010 0.0010 mg/l

EPA 7740 Selenium 0.0010 0.0050 mg/l

Metals (Dissolved) by EPA 6000/7000 Series Methods

in Water

#### **Method Analyte MDL MRL Units**

- EPA 6010 Aluminum, dissolved 0.010 0.050 mg/l
- EPA 6010 Antimony, dissolved 0.0050 0.020 mg/l
- EPA 6010 Barium, dissolved 0.00050 0.010 mg/l
- EPA 6010 Beryllium, dissolved 0.00020 0.010 mg/l
- EPA 6010 Boron, dissolved 0.010 0.10 mg/l
- EPA 6010 Cadmium, dissolved 0.00050 0.010 mg/l
- EPA 6010 Calcium, dissolved 0.030 1.0 mg/l
- EPA 6010 Chromium, dissolved 0.0010 0.050 mg/l
- EPA 6010 Cobalt, dissolved 0.0030 0.020 mg/l
- EPA 6010 Copper, dissolved 0.0040 0.10 mg/l
- EPA 6010 Iron, dissolved 0.010 0.10 mg/l
- EPA 6010 Lead, dissolved 0.0020 0.050 mg/l EPA 6010 Magnesium, dissolved 0.020 1.0 mg/l
- EPA 6010 Manganese, dissolved 0.00070 0.050 mg/l
- EPA 6010 Molybdenum, dissolved 0.0010 1.0 mg/l
- EPA 6010 Nickel, dissolved 0.0030 0.10 mg/l
- EPA 6010 Potassium, dissolved 0.010 1.0 mg/l
- EPA 6010 Silver, dissolved 0.0020 0.050 mg/l
- EPA 6010 Sodium, dissolved 0.020 1.0 mg/l
- EPA 6010 Thallium, dissolved 0.010 0.40 mg/l
- EPA 6010 Titanium, dissolved 0.0010 0.50 mg/l
- EPA 6010 Tin, dissolved 0.0060 0.50 mg/l
- EPA 6010 Vanadium, dissolved 0.0010 0.50 mg/l
- EPA 6010 Zinc, dissolved 0.0050 0.10 mg/l
- EPA 7060 Arsenic, dissolved 0.00070 0.0020 mg/l
- EPA 7470 Mercury, dissolved 0.00010 0.0010 mg/l
- EPA 7740 Selenium, dissolved 0.0010 0.0050 mg/l

### Conventional Chemistry Parameters by APHA/EPA Methods

#### in Water

- EPA 1664 Oil & Grease (HEM) 1.5 5.0 mg/l
- SM2310B Turbidity 0.10 NTU
- SM2320B Bicarbonate Alkalinity as CaCO3 2.2 5.0 mg/l
- SM2320B Bicarbonate Alkalinity as CaCO3 2.2 5.0 mg/l
- SM2320B Carbonate Alkalinity as CaCO3 2.2 5.0 mg/l
- SM2320B Hydroxide Alkalinity as CaCO3 2.2 5.0 mg/l
- SM2320B Total Alkalinity as CaCO3 2.2 5.0 mg/l
- SM2340B Hardness, Total 1.00 5.00 mg/l
- SM2510B Specific Conductance (EC) 1.0 20 umhos/cm
- SM2540C Total Dissolved Solids 4.2 10 mg/l
- SM2540D Total Suspended Solids 0.30 1.0 mg/l
- SM4500-H+ B pH 1.000 1.000 pH Units
- SM5210B Biochemical Oxygen Demand 1.0 5.0 mg/l
- SM5220D Chemical Oxygen Demand 3.2 10 mg/l
- SM5550B Tannins & Lignins 0.10 0.50 mg/l Anions by EPA Method 300.0

#### in Water

- EPA 300.0 Nitrate as NO3 0.30 1.0 mg/l
- EPA 300.0 Chloride 0.030 0.50 mg/l
- EPA 300.0 Fluoride 0.060 0.10 mg/l
- EPA 300.0 Nitrate as N 0.050 0.20 mg/l
- EPA 300.0 Sulfate as SO4 0.050 0.50 mg/l

#### Method Analyte MDL MRL Units TPH by EPA/LUFT GC/GCMS Methods in Water

- 8015DRO TPH as Diesel 10 50 ug/l
- 8015DRO TPH as Motor Oil 61 100 ug/l
- 8015DRO Tetratetracontane Surrogate
- 8015DRO Tetratetracontane Surrogate
- 8260GRO TPH as Gasoline 50 ug/l
- 8260GRO Toluene-d8 Surrogate

#### Volatile Organic Compounds by EPA Method 524.2 in Water

- EPA 524.2 Acetone 0.80 5.0 ug/l
- EPA 524.2 Acrylonitrile 0.20 5.0 ug/l
- EPA 524.2 Benzene 0.20 0.30 ug/l
- EPA 524.2 Bromobenzene 0.10 0.50 ug/l
- EPA 524.2 Bromochloromethane 0.20 0.50 ug/l
- EPA 524.2 Bromodichloromethane 0.30 0.50 ug/l

EPA 524.2 Bromoform 0.20 0.50 ug/l EPA 524.2 Bromomethane 0.20 0.50 ug/l EPA 524.2 n-Butylbenzene 0.10 0.50 ug/l EPA 524.2 sec-Butylbenzene 0.10 0.50 ug/l EPA 524.2 tert-Butylbenzene 0.10 0.50 ug/l EPA 524.2 Carbon disulfide 0.20 0.50 ug/l EPA 524.2 Carbon tetrachloride 0.30 0.50 ug/l EPA 524.2 Chlorobenzene 0.20 0.50 ug/l EPA 524.2 Chloroethane 0.10 0.50 ug/l EPA 524.2 Chloroform 0.10 0.50 ug/l EPA 524.2 Chloromethane 0.20 0.50 ug/l EPA 524.2 2-Chlorotoluene 0.20 0.50 ug/l EPA 524.2 4-Chlorotoluene 0.10 0.50 ug/l EPA 524.2 Dibromochloromethane 0.20 0.50 ug/l EPA 524.2 1,2-Dibromo-3-chloropropane 0.36 0.50 ug/l EPA 524.2 1,2-Dibromoethane (EDB) 0.14 0.50 ug/l EPA 524.2 Dibromomethane 0.20 0.50 ug/l EPA 524.2 1,2-Dichlorobenzene 0.20 0.50 ug/l EPA 524.2 1,3-Dichlorobenzene 0.20 0.50 ug/l EPA 524.2 1.4-Dichlorobenzene 0.10 0.50 ug/l EPA 524.2 trans-1,4-Dichloro-2-butene 0.095 5.0 ug/l EPA 524.2 Dichlorodifluoromethane 0.20 0.50 ug/l EPA 524.2 1,1-Dichloroethane 0.10 0.50 ug/l EPA 524.2 1.2-Dichloroethane 0.20 0.50 ug/l EPA 524.2 1,1-Dichloroethene 0.10 0.30 ug/l EPA 524.2 cis-1,2-Dichloroethene 0.20 0.50 ug/l EPA 524.2 trans-1,2-Dichloroethene 0.20 0.50 ug/l EPA 524.2 1,3-Dichloropropene (total) 0.20 0.50 ug/l EPA 524.2 trans-1,2-Dichloroethene 0.20 0.50 ug/l EPA 524.2 1,2-Dichloropropane 0.20 0.50 ug/l EPA 524.2 1,3-Dichloropropane 0.20 0.50 ug/l EPA 524.2 2,2-Dichloropropane 0.10 0.50 ug/l EPA 524.2 1,1-Dichloropropene 0.10 0.50 ug/l EPA 524.2 cis-1,3-Dichloropropene 0.20 0.50 ug/l EPA 524.2 trans-1,3-Dichloropropene 0.20 0.50 ug/l EPA 524.2 2-Hexanone 0.097 5.0 ug/l EPA 524.2 Ethylbenzene 0.10 0.50 ug/l

#### **Method Analyte MDL MRL Units**

EPA 524.2 Hexachlorobutadiene 0.30 0.50 ug/l EPA 524.2 Isopropylbenzene 0.20 0.50 ug/l EPA 524.2 p-Isopropyltoluene 0.10 0.50 ug/l EPA 524.2 Methyl ethyl ketone 0.40 1.0 ug/l EPA 524.2 Methyl iodide 0.12 2.0 ug/l EPA 524.2 Methyl isobutyl ketone 0.30 1.0 ug/l EPA 524.2 Methyl tert-butyl ether 0.50 0.50 ug/l EPA 524.2 Methylene chloride 0.40 0.50 ug/l EPA 524.2 Naphthalene 0.20 0.50 ug/l EPA 524.2 n-Propylbenzene 0.20 0.50 ug/l EPA 524.2 Styrene 0.10 0.50 ug/l EPA 524.2 1,1,1,2-Tetrachloroethane 0.20 0.50 ug/l EPA 524.2 1,1,2,2-Tetrachloroethane 0.20 0.50 ug/l EPA 524.2 Tetrachloroethene 0.20 0.50 ug/l EPA 524.2 Toluene 0.10 0.50 ug/l EPA 524.2 1,2,3-Trichlorobenzene 0.10 0.50 ug/l EPA 524.2 1,2,4-Trichlorobenzene 0.20 0.50 ug/l EPA 524.2 1,1,1-Trichloroethane 0.20 0.50 ug/l EPA 524.2 1,1,2-Trichloroethane 0.20 0.50 ug/l EPA 524.2 Trichloroethene 0.20 0.50 ug/l EPA 524.2 Trichlorofluoromethane 0.20 0.50 ug/l EPA 524.2 Trichlorotrifluoroethane 0.20 0.50 ug/l EPA 524.2 1.2.3-Trichloropropane 0.13 0.50 ug/l EPA 524.2 1,2,4-Trimethylbenzene 0.10 0.50 ug/l EPA 524.2 1,3,5-Trimethylbenzene 0.10 0.50 ug/l EPA 524.2 Vinyl chloride 0.10 0.50 ug/l EPA 524.2 m.p-Xvlene 0.20 0.50 ug/l EPA 524.2 o-Xylene 0.10 0.50 ug/l EPA 524.2 Xylenes (total) 0.20 0.50 ug/l EPA 524.2 Trihalomethanes (total) 0.30 0.50 ug/l EPA 524.2 Bromofluorobenzene Surrogate

EPA 524.2 Dibromofluoromethane Surrogate

EPA 524.2 Toluene-d8 Surrogate

### Volatile Organic Compounds by EPA Method 624 in Water

EPA 624 Benzene 0.053 0.30 ug/l

EPA 624 Bromodichloromethane 0.095 0.50 ug/l

EPA 624 Bromoform 0.093 0.50 ug/l

EPA 624 Bromomethane 0.077 0.50 ug/l

EPA 624 Carbon tetrachloride 0.11 0.50 ug/l

EPA 624 Chlorobenzene 0.083 0.50 ug/l

EPA 624 Chloroethane 0.13 0.50 ug/l

EPA 624 Chloroform 0.11 0.50 ug/l

EPA 624 Chloromethane 0.097 0.50 ug/l

EPA 624 Chlorotoluene 0.40 0.50 ug/l

EPA 624 Dibromochloromethane 0.075 0.50 ug/l

EPA 624 1,2-Dichlorobenzene 0.099 0.50 ug/l

EPA 624 1,3-Dichlorobenzene 0.069 0.50 ug/l

EPA 624 1,4-Dichlorobenzene 0.11 0.50 ug/l

EPA 624 Dichlorodifluoromethane 0.15 0.50 ug/l

EPA 624 1,1-Dichloroethane 0.072 0.50 ug/l

EPA 624 1,2-Dichloroethane 0.17 0.50 ug/l

EPA 624 1,1-Dichloroethene 0.14 0.30 ug/l

#### Method Analyte MDL MRL Units

EPA 624 cis-1,2-Dichloroethene 0.11 0.50 ug/l

EPA 624 trans-1,2-Dichloroethene 0.11 0.50 ug/l

EPA 624 1,2-Dichloropropane 0.12 0.50 ug/l

EPA 624 cis-1,3-Dichloropropene 0.060 0.50 ug/l

EPA 624 trans-1,3-Dichloropropene 0.072 0.50 ug/l

EPA 624 Ethylbenzene 0.080 0.50 ug/l

EPA 624 Methylene chloride 0.48 0.50 ug/l

EPA 624 1,1,2,2-Tetrachloroethane 0.086 0.50 ug/l

EPA 624 Tetrachloroethene 0.092 0.50 ug/l

EPA 624 1,1,1-Trichloroethane 0.091 0.50 ug/l

EPA 624 Toluene 0.092 0.30 ug/l

EPA 624 1,1,2-Trichloroethane 0.13 0.50 ug/l

EPA 624 Trichloroethene 0.12 0.50 ug/l

EPA 624 Trichlorofluoromethane 0.096 0.50 ug/l

EPA 624 Vinyl chloride 0.060 0.50 ug/l

EPA 624 Xylenes (total) 0.26 0.50 ug/l

EPA 624 Bromofluorobenzene Surrogate

EPA 624 Dibromofluoromethane Surrogate EPA 624 Toluene-d8 Surrogate

#### Volatile Organic Compounds by EPA Method 8260B

#### in Water

EPA 8260B Acetone 0.29 5.0 ug/l

EPA 8260B Benzene 0.053 0.30 ug/l

EPA 8260B Benzene 0.053 0.30 ug/l

EPA 8260B Toluene 0.092 0.30 ug/l

EPA 8260B Bromobenzene 0.11 0.50 ug/l

EPA 8260B Bromodichloromethane 0.095 0.50 ug/l

EPA 8260B Ethylbenzene 0.080 0.50 ug/l

EPA 8260B Bromochloromethane 0.085 0.50 ug/l

EPA 8260B Bromoform 0.093 0.50 ug/l

EPA 8260B Xylenes (total) 0.26 0.50 ug/l

EPA 8260B Bromodichloromethane 0.095 0.50 ug/l

EPA 8260B Bromofluorobenzene Surrogate

EPA 8260B Bromomethane 0.077 0.50 ug/l

EPA 8260B Bromoform 0.093 0.50 ug/l

EPA 8260B Carbon tetrachloride 0.11 0.50 ug/l

EPA 8260B Dibromofluoromethane Surrogate EPA 8260B Bromomethane 0.077 0.50 ug/l

EPA 8260B Chlorobenzene 0.083 0.50 ug/l

EPA 8260B Toluene-d8 Surrogate

EPA 8260B Chloroethane 0.13 0.50 ug/l

EPA 8260B n-Butvlbenzene 0.087 0.50 ug/l

EPA 8260B Chloroform 0.11 0.50 ug/l

EPA 8260B sec-Butylbenzene 0.082 0.50 ug/l

EPA 8260B Chloromethane 0.097 0.50 ug/l

EPA 8260B tert-Butylbenzene 0.087 0.50 ug/l

EPA 8260B Carbon tetrachloride 0.11 0.50 ug/l EPA 8260B Dibromochloromethane 0.075 0.50 ug/l EPA 8260B 1,2-Dibromoethane (EDB) 0.079 0.50 ug/l EPA 8260B Chlorobenzene 0.083 0.50 ug/l EPA 8260B 1,2-Dichlorobenzene 0.099 0.50 ug/l EPA 8260B Chloroethane 0.13 0.50 ug/l EPA 8260B 1,3-Dichlorobenzene 0.069 0.50 ug/l

#### Method Analyte MDL MRL Units

EPA 8260B Chloroform 0.11 0.50 ug/l EPA 8260B 1,4-Dichlorobenzene 0.11 0.50 ug/l EPA 8260B Chloromethane 0.097 0.50 ug/l EPA 8260B 1,1-Dichloroethane 0.072 0.50 ug/l EPA 8260B 2-Chlorotoluene 0.15 0.50 ug/l EPA 8260B 1,2-Dichloroethane 0.17 0.50 ug/l EPA 8260B 4-Chlorotoluene 0.068 0.50 ug/l EPA 8260B 1,1-Dichloroethene 0.14 0.50 ug/l EPA 8260B Dibromochloromethane 0.075 0.50 ug/l EPA 8260B 1,2-Dibromo-3-chloropropane 0.36 2.0 ug/l EPA 8260B cis-1,2-Dichloroethene 0.11 0.50 ug/l EPA 8260B 1,2-Dibromoethane (EDB) 0.079 0.50 ug/l EPA 8260B trans-1,2-Dichloroethene 0.11 0.50 ug/l EPA 8260B 1,2-Dichloropropane 0.12 0.50 ug/l EPA 8260B Dibromomethane 0.079 0.50 ug/l EPA 8260B 1,2-Dichlorobenzene 0.099 0.50 ug/l EPA 8260B cis-1,3-Dichloropropene 0.060 0.50 ug/l EPA 8260B 1,3-Dichlorobenzene 0.069 0.50 ug/l EPA 8260B trans-1,3-Dichloropropene 0.072 0.50 ug/l EPA 8260B 1,4-Dichlorobenzene 0.11 0.50 ug/l EPA 8260B Ethylbenzene 0.080 0.50 ug/l EPA 8260B Dichlorodifluoromethane 0.15 0.50 ug/l EPA 8260B Methyl ethyl ketone 0.35 1.0 ug/l EPA 8260B 1,1-Dichloroethane 0.072 0.50 ug/l EPA 8260B Methyl isobutyl ketone 0.11 1.0 ug/l EPA 8260B 1.2-Dichloroethane 0.17 0.50 ug/l EPA 8260B Methylene chloride 0.48 0.50 ug/l EPA 8260B 1,1-Dichloroethene 0.14 0.50 ug/l EPA 8260B Styrene 0.059 0.50 ug/l EPA 8260B 1,1,2,2-Tetrachloroethane 0.086 0.50 ug/l EPA 8260B cis-1,2-Dichloroethene 0.11 0.50 ug/l EPA 8260B Tetrachloroethene 0.092 0.50 ug/l EPA 8260B trans-1,2-Dichloroethene 0.11 0.50 ug/l EPA 8260B 1,2-Dichloropropane 0.12 0.50 ug/l EPA 8260B Toluene 0.092 0.30 ug/l EPA 8260B 1,1,1-Trichloroethane 0.091 0.50 ug/l EPA 8260B 1,3-Dichloropropane 0.094 0.50 ug/l EPA 8260B 2,2-Dichloropropane 0.13 0.50 ug/l EPA 8260B Trichloroethene 0.12 0.50 ug/l EPA 8260B 1,1-Dichloropropene 0.11 0.50 ug/l EPA 8260B m,p-Xylene 0.15 0.50 ug/l EPA 8260B cis-1,3-Dichloropropene 0.060 0.50 ug/l EPA 8260B o-Xylene 0.11 0.50 ug/l EPA 8260B trans-1,3-Dichloropropene 0.072 0.50 ug/l EPA 8260B Xylenes (total) 0.26 0.50 ug/l EPA 8260B Bromofluorobenzene 0.50 Surrogate EPA 8260B Ethylbenzene 0.080 0.50 ug/l EPA 8260B Dibromofluoromethane 0.50 Surrogate EPA 8260B Hexachlorobutadiene 0.12 0.50 ug/l EPA 8260B Isopropylbenzene 0.072 0.50 ug/l EPA 8260B Toluene-d8 0.50 Surrogate EPA 8260B p-Isopropyltoluene 0.073 0.50 ug/l EPA 8260B Methyl ethyl ketone 0.35 1.0 ug/l

#### Method Analyte MDL MRL Units

EPA 8260B Methyl tert-butyl ether 0.45 0.50 ug/l EPA 8260B Methylene chloride 0.48 0.50 ug/l

EPA 8260B Methyl isobutyl ketone 0.11 1.0 ug/l

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EPA 8260B Naphthalene 0.14 0.50 ug/l
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EPA 8260B n-Propylbenzene 0.18 0.50 ug/l

EPA 8260B Styrene 0.059 0.50 ug/l

EPA 8260B 1,1,1,2-Tetrachloroethane 0.17 0.50 ug/l

EPA 8260B 1,1,2,2-Tetrachloroethane 0.086 0.50 ug/l

EPA 8260B Tetrachloroethene 0.092 0.50 ug/l

EPA 8260B Toluene 0.092 0.30 ug/l

EPA 8260B 1,2,3-Trichlorobenzene 0.089 0.50 ug/l

EPA 8260B 1,2,4-Trichlorobenzene 0.24 0.50 ug/l

EPA 8260B 1,1,1-Trichloroethane 0.091 0.50 ug/l

EPA 8260B 1,1,2-Trichloroethane 0.13 0.50 ug/l

EPA 8260B Trichloroethene 0.12 0.50 ug/l

EPA 8260B Trichlorofluoromethane 0.096 0.50 ug/l

EPA 8260B Trichlorotrifluoroethane 0.11 0.50 ug/l

EPA 8260B 1,2,3-Trichloropropane 0.14 0.50 ug/l

EPA 8260B 1,2,4-Trimethylbenzene 0.11 0.50 ug/l

EPA 8260B 1,3,5-Trimethylbenzene 0.057 0.50 ug/l

EPA 8260B Vinyl chloride 0.060 0.50 ug/l

EPA 8260B m,p-Xylene 0.15 0.50 ug/l

EPA 8260B o-Xylene 0.11 0.50 ug/l

EPA 8260B Xylenes (total) 0.26 0.50 ug/l

EPA 8260B Dibromofluoromethane Surrogate

EPA 8260B Toluene-d8 Surrogate

EPA 8260B Bromofluorobenzene Surrogate

## Organochlorine Pesticides and PCBs by EPA Method 608 in Water

EPA 608 Aldrin 0.0060 0.010 ug/l

EPA 608 HCH-alpha 0.0010 0.010 ug/l

EPA 608 HCH-beta 0.0030 0.050 ug/l

EPA 608 HCH-delta 0.0020 0.050 ug/l

EPA 608 HCH-gamma (Lindane) 0.0040 0.010 ug/l

EPA 608 Chlordane (tech) 0.035 0.050 ug/l

EPA 608 4,4'-DDD 0.0030 0.020 ug/l

EPA 608 4,4'-DDE 0.0020 0.020 ug/l

EPA 608 4,4'-DDT 0.0070 0.020 ug/l

EPA 608 Dieldrin 0.0020 0.010 ug/l

EPA 608 Endosulfan I 0.0020 0.010 ug/l

EPA 608 Endosulfan II 0.0020 0.020 ug/l

EPA 608 Endosulfan sulfate 0.0020 0.050 ug/l

EPA 608 Endrin 0.0060 0.010 ug/l

EPA 608 Endrin aldehyde 0.0080 0.050 ug/l

EPA 608 Heptachlor 0.0040 0.020 ug/l

EPA 608 Heptachlor epoxide 0.0050 0.020 ug/l

EPA 608 Methoxychlor 0.0040 0.020 ug/l

EPA 608 Toxaphene 0.30 0.50 ug/l

EPA 608 PCB-1016 0.040 0.50 ug/l

EPA 608 PCB-1221 0.050 0.50 ug/l

EPA 608 PCB-1232 0.050 0.50 ug/l

EPA 608 PCB-1242 0.050 0.50 ug/l EPA 608 PCB-1248 0.050 0.50 ug/l

EPA 608 PCB-1254 0.050 0.50 ug/l

#### Method Analyte MDL MRL Units

EPA 608 PCB-1260 0.050 0.50 ug/l

EPA 608 Dibutylchlorendate Surrogate

## Chlorinated Herbicides by EPA Method 8151A in Water

EPA 8151A 2,4-D 0.60 1.0 ug/l

EPA 8151A 2,4-DB 2.0 5.0 ug/l

EPA 8151A 2,4,5-T 0.20 0.50 ug/l

EPA 8151A 2,4,5-TP (Silvex) 0.20 0.50 ug/l

EPA 8151A Dalapon 0.60 6.0 ug/l

EPA 8151A Dicamba 0.060 0.40 ug/l

EPA 8151A Dinoseb 0.40 1.0 ug/l

EPA 8151A MCPA 100 300 ug/l

EPA 8151A MCPP 90 300 ua/l

EPA 8151A Dichlorprop 0.50 1.0 ug/l

EPA 8151A Pentachlorophenol 0.070 0.20 ug/l

EPA 8151A Picloram 0.80 1.0 ug/l

EPA 8151A DCAA Surrogate

#### Semivolatile Organic Compounds by EPA Method 8270C in Water

- EPA 8270C Acenaphthene 0.57 10 ug/l
- EPA 8270C Acenaphthylene 0.48 10 ug/l
- EPA 8270C Anthracene 0.39 10 ug/l
- EPA 8270C Benzidine 3.4 50 ug/l
- EPA 8270C Benzo (a) anthracene 0.39 10 ug/l
- EPA 8270C Benzo (a) pyrene 0.50 10 ug/l
- EPA 8270C Benzo (b) fluoranthene 0.64 10 ug/l
- EPA 8270C Benzo (g,h,i) perylene 0.93 10 ug/l
- EPA 8270C Benzo (k) fluoranthene 0.34 10 ug/l
- EPA 8270C Benzoic acid 12 50 ug/l
- EPA 8270C Benzyl alcohol 6.7 20 ug/l
- EPA 8270C Bis(2-chloroethoxy)methane 0.81 10 ug/l
- EPA 8270C Bis(2-chloroethyl)ether 0.14 10 ug/l
- EPA 8270C Bis(2-chloroisopropyl)ether 0.41 10 ug/l
- EPA 8270C Bis(2-ethylhexyl)phthalate 0.83 10 ug/l
- EPA 8270C 4-Bromophenyl phenyl ether 0.43 10 ug/l
- EPA 8270C Butyl benzyl phthalate 0.64 10 ug/l
- EPA 8270C 4-Chloro-3-methylphenol 0.58 10 ug/l
- EPA 8270C 4-Chloroaniline 6.2 20 ug/l
- EPA 8270C 2-Chloronaphthalene 0.57 10 ug/l EPA 8270C 2-Chlorophenol 0.66 10 ug/l
- EPA 8270C 4-Chlorophenyl phenyl ether 0.93 10 ug/l
- EPA 8270C Chrysene 0.76 10 ug/l
- EPA 8270C Di-n-butyl phthalate 0.91 10 ug/l
- EPA 8270C Di-n-octyl phthalate 0.65 10 ug/l
- EPA 8270C Dibenz (a,h) anthracene 0.83 10 ug/l
- EPA 8270C Dibenzofuran 0.86 10 ug/l
- EPA 8270C 1,2-Dichlorobenzene 0.61 10 ug/l
- EPA 8270C 1,3-Dichlorobenzene 0.62 10 ug/l
- EPA 8270C 1,4-Dichlorobenzene 0.61 10 ug/l
- EPA 8270C 3,3'-Dichlorobenzidine 2.0 20 ug/l
- EPA 8270C 2,4-Dichlorophenol 0.66 10 ug/l
- EPA 8270C Diethyl phthalate 0.86 10 ug/l

#### **Method Analyte MDL MRL Units**

- EPA 8270C Dimethyl phthalate 0.68 10 ug/l
- EPA 8270C 2,4-Dimethylphenol 1.2 10 ug/l
- EPA 8270C 4,6-Dinitro-2-methylphenol 0.75 50 ug/l
- EPA 8270C 2,4-Dinitrophenol 1.3 50 ug/l
- EPA 8270C 2,4-Dinitrotoluene 0.68 10 ug/l
- EPA 8270C 2,6-Dinitrotoluene 0.54 10 ug/l
- EPA 8270C 1,2-Diphenylhydrazine 0.33 10 ug/l
- EPA 8270C Fluoranthene 0.76 10 ug/l
- EPA 8270C Fluorene 0.81 10 ug/l
- EPA 8270C Hexachlorobenzene 0.89 10 ug/l
- EPA 8270C Hexachlorobutadiene 0.84 10 ug/l
- EPA 8270C Hexachlorocyclopentadiene 0.45 15 ug/l
- EPA 8270C Hexachloroethane 0.58 10 ug/l
- EPA 8270C Indeno (1,2,3-cd) pyrene 0.63 10 ug/l
- EPA 8270C Isophorone 0.81 10 ug/l
- EPA 8270C 2-Methylnaphthalene 1.0 10 ug/l
- EPA 8270C 2-Methylphenol (o-cresol) 0.64 10 ug/l
- EPA 8270C 3 & 4-Methylphenol (m,p-cresol) 0.60 10 ug/l
- EPA 8270C N-Nitrosodi-n-propylamine 0.85 10 ug/l
- EPA 8270C N-Nitrosodimethylamine 1.1 5.0 ug/l
- EPA 8270C N-Nitrosodiphenylamine 0.90 10 ug/l
- EPA 8270C Naphthalene 0.66 10 ug/l
- EPA 8270C 2-Nitroaniline 3.3 50 ug/l
- EPA 8270C 3-Nitroaniline 4.3 50 ug/l
- EPA 8270C 4-Nitroaniline 11 50 ug/l
- EPA 8270C Nitrobenzene 0.74 10 ug/l
- EPA 8270C 2-Nitrophenol 0.90 10 ug/l
- EPA 8270C 4-Nitrophenol 0.99 50 ug/l
- EPA 8270C Pentachlorophenol 1.4 50 ug/l
- EPA 8270C Phenanthrene 0.65 10 ug/l EPA 8270C Phenol 0.46 10 ug/l
- EPA 8270C Pyrene 0.45 10 ug/l
- EPA 8270C 1,2,4-Trichlorobenzene 0.59 10 ug/l

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EPA 8270C 2,4,5-Trichlorophenol 0.58 10 ug/l
EPA 8270C 2,4,6-Trichlorophenol 0.74 10 ug/l
EPA 8270C 2-Fluorobiphenyl Surrogate
EPA 8270C 2-Fluorophenol Surrogate
EPA 8270C Nitrobenzene-d5 Surrogate
EPA 8270C p-Terphenyl-d14 Surrogate
EPA 8270C Phenol-d6 Surrogate
EPA 8270C 2,4,6-Tribromophenol Surrogate
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### Sampling Guide - Alpha Analytical Laboratories, Inc.

#### Hold Amount

Analysis SpecificMethod Container Preservation (days) Needed

\*\*\* DEFAULT GENERAL METHOD \*\*\* in Water

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Digest-Metals - Other

*** DEFAULT PRESERVATION *** 14 -Filtration -

*** DEFAULT CONTAINER *** <6°C 180 -GeoTracker EDT - 1 Liter Brown Poly -NaOH

*** DEFAULT PRESERVATION *** 0 -Handling & Disposal -

*** DEFAULT CONTAINER ***

*** DEFAULT PRESERVATION *** 365 - J Flags -

*** DEFAULT CONTAINER ***

*** DEFAULT PRESERVATION *** 0 -

27 Metals Dissolved varies NA [Group Analysis] 10 NA

27 Metals in Water varies NA [Group Analysis] 10 NA

CAM 17 TTLC Water varies NA [Group Analysis] 10 NA

MCDPW- Standard Mineral varies NA [Group Analysis] 10 NA

TPH G/BTEX 8260 varies NA [Group Analysis] 10 NA

Field Analyses
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#### in Water

pH Field SM4500 SM4500-H+ B 250 mL Poly Unpres <6°C 14 250ml

#### Metals (Drinking Water) by EPA 200 Series Methods

#### in Water

Ca DW ICP 200.7 EPA 200.7 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml K DW ICP 200.7 EPA 200.7 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Mg DW ICP 200.7 EPA 200.7 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Na DW ICP 200.7 EPA 200.7 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Na DW ICP 200.7 EPA 200.7 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml

#### Metals by EPA 200 Series Methods

#### in Water

Al Total ICP 200.7 EPA 200.7 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cu Total ICP 200.7 EPA 200.7 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Fe Total ICP 200.7 EPA 200.7 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Mn Total ICP 200.7 EPA 200.7 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Zn Total ICP 200.7 EPA 200.7 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Pb Total GFAA 200.9 EPA 200.9 500 mL Poly HNO3 Add HNO3 to pH<2 180 100 ml

#### Metals by EPA 6000/7000 Series Methods

#### in Water

Ag Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Ag Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Al Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Al Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml B Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Ba Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Ba Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Ba Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Be Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Be Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Ca Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cd Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cd Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cd Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cd Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cd Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cd Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cd Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cd Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cd Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cd Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cd Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cd Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cd Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml

#### Analysis SpecificMethod Container Preservation (days) Needed

Co Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cr Total ICP 6010 EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cr Total ICP 6010 EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cu Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cu Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cu Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Cu Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml

Fe Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Fe Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml K Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Mg Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Mn Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Mn Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Mo Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Mo Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Na Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Ni Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Ni Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Pb Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Sb Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Sb Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Sn Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Ti Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml TI Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml TI Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml V Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml V Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Zn Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Zn Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Zn Total ICP 6010A EPA 6010 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml As Total GFAA 7060A EPA 7060 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml As Total GFAA 7060A EPA 7060 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Pb Total GFAA 7421 EPA 7421 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Pb Total GFAA 7421 EPA 7421 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Hg Total CVAA 7470 EPA 7470 500 mL Amber HN03 Add HNO3 to pH<2 28 500 ml Hg Total CVAA 7470 EPA 7470 500 mL Amber HN03 Add HNO3 to pH<2 28 500 ml Se Total GFAA 7740 EPA 7740 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Se Total GFAA 7740 EPA 7740 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Metals (Dissolved) by EPA 6000/7000 Series Methods

### in Water

Ag Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2. <6°C 180 500ml Al Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2. <6°C 180 500ml B Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2, <6°C 180 500ml Ba Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2, <6°C 180 500ml Be Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field: HNO3 to pH<2, <6°C 180 500ml

Ca Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to

pH<2. <6°C 180 500ml

Cd Diss ICP 6010A EPA 6010 500 mL Poly HNO3

Filter in Field; HNO3 to pH<2, <6°C 180 500ml

#### **Hold Amount**

Analysis SpecificMethod Container Preservation (days) Needed

Co Diss ICP 6010A EPA 6010 500 mL Poly HNO3

Filter in Field; HNO3 to

pH<2, <6°C 180 500ml

Cr Diss ICP 6010A EPA 6010 500 mL Poly HNO3

Filter in Field; HNO3 to

pH<2, <6°C 180 500ml

Cu Diss ICP 6010A EPA 6010 500 mL Poly HNO3

Filter in Field; HNO3 to

pH<2, <6°C 180 500ml

Fe Diss ICP 6010A EPA 6010 500 mL Poly HNO3

Filter in Field; HNO3 to

pH<2, <6°C 180 500ml

K Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field: HNO3 to pH<2, <6°C 180 500ml Mg Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2, <6°C 180 500ml Mn Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2, <6°C 180 500ml Mo Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2. <6°C 180 500ml Na Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field: HNO3 to pH<2, <6°C 180 500ml Ni Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2, <6°C 180 500ml Pb Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field: HNO3 to pH<2, <6°C 180 500ml Sb Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2. <6°C 180 500ml Sn Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2, <6°C 180 500ml Ti Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2, <6°C 180 500ml TI Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2, <6°C 180 500ml V Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2, <6°C 180 500ml Zn Diss ICP 6010A EPA 6010 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2. <6°C 180 500ml As Diss GFAA 7060A EPA 7060 500 mL Poly HNO3 Filter in Field; HNO3 to pH<2, <6°C 180 500ml Hg Diss CVAA 7470 EPA 7470 500 mL Poly Unpres Filter in Field; HNO3 to pH<2, <6°C 28 500ml Se Diss GFAA 7740 EPA 7740 500 mL Poly HNO3 Add HNO3 to pH<2 180 500ml Conventional Chemistry Parameters by APHA/EPA Methods in Water O&G (HEM) EPA 1664 1L Amber-H2SO4 Add H2SO4 to pH<2;

<6°C 28 2 1L

Turbidity-2310B SM2310B 500 mL Poly Unpres <6°C 2 100 ml Alkalinity 2320B SM2320B 500 mL Poly Unpres <6°C 14 500 ml Alkalinity 2320B SM2320B 500 mL Poly Unpres <6°C 14 500 ml Bicarbonate Alkalinity SM2320B 500 mL Poly Unpres <6°C 14 500 ml Hardness Calc SM2340B SM2340B 250 mL Poly HNO3 Add HNO3 to pH<2 180 250ML Conductivity SM2510B 500 mL Poly Unpres <6°C 28 500 ml Conductivity SM2510B 500 mL Poly Unpres <6°C 28 500 ml Solids, TDS-SM2540C SM2540C 1L Poly - Unpres <6°C 7 500ml Solids, TDS-SM2540C SM2540C 1L Poly - Unpres <6°C 7 500ml Solids, TSS-SM2540D SM2540D 1L Poly - Unpres <6°C 7 1000 ml

Analysis SpecificMethod Container Preservation (days) Needed

pH water SM4500 SM4500-H+ B 250 mL Poly Unpres <6°C 0.01 250ml pH water SM4500 SM4500-H+ B 250 mL Poly Unpres <6°C 0.01 250ml BOD-SM5210B SM5210B Half gallon - poly <6°C 2 1000ml COD-5220D SM5220D 500 mL Poly H2SO4 Add H2SO4 to pH<2; <6°C 28 120ml

COD-5220D SM5220D 500 mL Poly H2SO4 Add H2SO4 to pH<2;

<6°C 28 120ml

Tan/Lig-SM5550B SM5550B 500 mL Poly Unpres <6°C 180 500 ml Anions by EPA Method 300.0

Chloride 300.0 EPA 300.0 500 mL Poly Unpres <6°C 28 500ml Chloride 300.0 EPA 300.0 500 mL Poly Unpres <6°C 28 500ml Fluoride 300.0 EPA 300.0 500 mL Poly Unpres <6°C 28 500ml Nitrate 300.0 EPA 300.0 500 mL Poly Unpres <6°C 2 500 ml Nitrate as N 300.0 EPA 300.0 500 mL Poly Unpres <6°C 2 500 ml Sulfate 300.0 EPA 300.0 500 mL Poly Unpres <6°C 28 500ml Sulfate 300.0 EPA 300.0 500 mL Poly Unpres <6°C 28 500ml

#### TPH by EPA/LUFT GC/GCMS Methods

#### in Water

TPH D/MO 8015DRO VOA Vial - Unpres <6°C 14 3 VOAs TPH D/MO Amber 8015DRO 1L Amber- Unpres. <6°C 14 2 1L TPH G 8260 8260GRO VOA Vial - HCI <6°C 14 3 VOA Vials

#### Volatile Organic Compounds by EPA Method 524.2

#### in Water

524.2 Volatiles EPA 524.2 VOA Vial - HCI

Dechlorinate: HCI to

pH<2; <6°C 14 4 VOA vials

524.2 Volatiles Caspar EPA 524.2 VOA Vial - HCI

Dechlorinate; HCl to pH<2; <6°C 14 4 VOA vials

### Volatile Organic Compounds by EPA Method 624

in Water

601/602 Volatiles EPA 624 VOA Vial - HCI

Dechlorinate; HCl to

pH<2; <6°C 14 4 VOA Vials

#### Volatile Organic Compounds by EPA Method 8260B in Water

8240 Volatiles EPA 8260B VOA Vial - HCI

Dechlorinate; HCI to

pH<2; <6°C 14 4 VOA vials

8260B Full List EPA 8260B VOA Vial - HCI

Dechlorinate; HCI to

pH<2; <6°C 14 4 VOA Vials

BTEX 8260 EPA 8260B VOA Vial - HCI

Dechlorinate; HCI to

pH<2; <6°C 14 4 VOA Vials

#### Organochlorine Pesticides and PCBs by EPA Method 608 in Water

608 Pest/PCB EPA 608 1L Amber- Unpres. <6°C 7 2 1L

#### Chlorinated Herbicides by EPA Method 8151A

8151 Herbicides Watr EPA 8151A 1L Amber- Unpres. <6°C 7 2 1L

#### **Hold Amount**

### Analysis SpecificMethod Container Preservation (days) Needed Semivolatile Organic Compounds by EPA Method 8270C

8270 Regular List EPA 8270C 1L Amber- Unpres. <6°C 7 2 1L Ambers

[END OF SCOPE OF WORK]

#### **EXHIBIT B**

#### **PAYMENT TERMS**

#### FOR LANDFILL WATER AND GAS MONITORING LABORATORY TESTING

CONSULTANT will provide the professional laboratory testing services described in this proposal on a not to exceed cost basis for the estimated fee of \$430,680 for tests as shown in Exhibit A with a breakdown of each test. The cost and scope of work are based on information available to CONSULTANT at this time. CONSULTANT will undertake efforts to accomplish each task as described in this proposal. The CONSULTANT is hopeful that the North Coast Regional Water Quality Control Board (NCRWQCB) will agree to reduce testing volumes pursuant to the efforts of the reporting agent for the county.

If conditions change, or if unforeseen circumstances are encountered, CONSULTANT will request an equitable adjustment to the estimated costs.

#### Costs

Costs for this scope of work are summarized as follows:

Total	\$430,680
With up to 50% Monitoring Reduction (possible)	\$215,340

#### **Assumptions**

Our scope of work and costs are predicated on the following assumptions:

- Costs include an annual 3% escalation in Alpha analytical laboratory fees.
- In addition, this estimate is based on the recent groundwater monitoring programs and does not include the five-year contaminants-of-concern (COC) sampling and analysis, as we anticipate a reduction in groundwater monitoring. Any such special COC tests required or other such additional testing required by NCRWQCB will be considered extra work to be authorized by addendum.
- 1. COUNTY shall pay CONSULTANT for all work required in the satisfactory completion of this Agreement in accordance with Consulting Services Cost Estimate outlined below.

2. The compensation payable to CONSULTANT hereunder shall not exceed the authorized contract amount for the term of this Agreement. The CONSULTANT shall invoice the COUNTY based on the attached rate schedule.

## Analytical Services Quotation

2012 Master Price Sheet Mendocino Co. Solid Waste Division Haward N. Dashiell, Director of Transportation Submitted by: Alpha Analytical Laboratories, Inc. Ukiah, CA

			TAT	Current	Proposed	#	Extended	Book
			(days)	Price	Price	Smpls	Price	Price
Matrix	Parameters	Method				per yr**		
Water	GeoTracker EDT	N/A	10	\$50.00	10% o	f Invoice Total	\$5,822.95	
Water	27 Metals Dissolved	Note 1	10	\$159.00	\$150.00	35	\$5,250.00	\$300.00
Water	27 Metals in Water	Note 1	10	\$159.00	\$150.00	51	\$7,650.00	\$300.00
Water	524.2 Volatiles	EPA 524.2	10	\$143.00	\$140.00	18	\$2,520.00	\$220.00
Water	601/602 Volatiles	EPA 624	10	\$106.00	\$110.00	11	\$1,210.00	\$200.00
Water	608 Pest/PCB	EPA 608	10	\$128.00	\$140.00	83	\$11,620.00	\$200.00
Water	8151 Herbicides Water	EPA 8151A	10	\$143.00	\$140.00	50	\$7,000.00	\$200.00
Air	8240 Volatiles	EPA 8240B	10	\$149.00	\$140.00	9	\$1,260.00	\$200.00
Water	8260B Full List	EPA 8260B	10	\$143.00	\$140.00	132	\$18,480.00	\$200.00
Water	8270 Regular List	EPA 8270C	10	\$250.00	\$250.00	50	\$12,500.00	\$350.00
Water	Al Total ICP 200.7	EPA 200.7	10	\$15.00	\$15.00	12	\$180.00	\$25.00
Water	Al Total ICP 6010A	EPA 6010	10	\$15.00	\$15.00	51	\$765.00	\$25.00
Water	Alkalinity 2320B	SM2320B	10	\$17.00	\$17.00	93	\$1,581.00	\$30.00
Water	Bicarbonate Alkalinity 2320B	SM2320B	10	\$15.00	\$15.00	15	\$225.00	\$30.00
Water	BOD-SM5210B	SM5210B	10	\$27.00	\$27.00	0	\$0.00	\$45.00
Water	CAM 17 TTLC Water	Note 1	10	\$133.00	\$130.00	1	\$130.00	\$250.00
Water	Chloride 300.0	EPA 300.0	10	\$18.00	\$18.00	112	\$2,016.00	\$25.00
Water	COD-SM5220D	SM5220D	10	\$27.00	\$25.00	55	\$1,375.00	\$45.00
Water	Conductivity	SM2510B	10	\$6.00	\$10.00	39	\$390.00	\$20.00
Water	Cu Total ICP 200.7	EPA 200.7	10	\$15.00	\$15.00	12	\$180.00	\$25.00
Water	Cu Total ICP 6010A	EPA 6010	10	\$15.00	\$15.00	52	\$780.00	\$25.00
Water	Digest-Metals	N/A	10	\$10.00	\$10.00	0	\$0.00	\$10.00
Water	Fe Total ICP 200.7	EPA 200.7	10	\$15.00	\$15.00	12	\$180.00	\$25.00
Water	Fe Total ICP 6010A	EPA 6010	10	\$15.00	\$15.00	51	\$765.00	\$25.00
Water	Filtration	N/A	10	\$10.00	\$10.00	35	\$350.00	\$10.00
Water	Handling & Disposal	N/A	10	\$3.00	\$3.00	170	\$510.00	\$3.00
Water	J flag Report Charge	N/a	10	\$10.00	\$10.00	36	\$360.00	\$10.00

Water	Mn Total ICP 200.7	EPA 200.7	10	\$15.00	\$15.00	12	\$180.00	\$25.00
Water	Mn Total ICP 6010A	EPA 6010	10	\$15.00	\$15.00	51	\$765.00	\$25.00
Water	Nitrate as N 300.0	EPA 300.0	10	\$18.00	\$18.00	85	\$1,530.00	\$25.00
Water	O&G (HEM)	EPA 1664	10	\$42.00	\$45.00	12	\$540.00	\$90.00
Water	Pb Total GFAA 200.9	EPA 200.9	10	\$15.00	\$15.00	15	\$225.00	\$30.00
Water	Pb Total GFAA 7421	EPA 7421	10	\$15.00	\$15.00	51	\$765.00	\$30.00
Water	pH Field	SM4500-H+ B	10	\$6.00	\$6.00	0	\$0.00	\$50.00
Water	pH Water SM4500	SM4500-H+ B	10	\$6.00	\$6.00	39	\$234.00	\$20.00
Water	Solids, TDS-SM2540C	SM2540C	10	\$11.00	\$15.00	112	\$1,680.00	\$35.00
Water	Solids, TSS-SM2540D	SM2540D	10	\$11.00	\$15.00	12	\$180.00	\$35.00
Water	Standard Mineral	Note 1	10	\$133.00	\$130.00	0	\$0.00	\$240.00
Water	Sulfate 300.0	EPA 300.0	10	\$18.00	\$18.00	85	\$1,530.00	\$25.00
Water	Tan/Lig-SM5550B	SM5550B	10	\$23.00	\$23.00	0	\$0.00	\$60.00
Water	TPH D/MO	8015DRO	10	\$56.00	\$50.00	1	\$50.00	\$65.00
Water	TPH G/BTEX 8260	Note 1	10	\$50.00	\$45.00	4	\$180.00	\$55.00
Water	Turbidity-2310B	SM2310B	10	\$11.00	\$10.00	4	\$40.00	\$20.00
Water	Zn Total ICP 200.7	EPA 200.7	10	\$15.00	\$15.00	0	\$0.00	\$25.00
Water	Zn Total ICP 6010A	EPA 6010	10	\$15.00	\$15.00	64	\$960.00	\$25.00

Total - Analysis only **\$86,136.0**0 per year

Note 1 - See attached for Method number and MDL's and PQL's \*\*Number of samples per year is based on number done last year

[END OF PAYMENT TERMS]

#### **EXHIBIT C**

#### **INSURANCE REQUIREMENTS**

#### FOR LANDFILL WATER AND GAS MONITORING LABORATORY TESTING

Insurance coverage in a minimum amount set forth herein shall not be construed to relieve CONSULTANT for liability in excess of such coverage, nor shall it preclude COUNTY from taking such other action as is available to it under any other provisions of this Agreement or otherwise in law.

CONSULTANT agrees to indemnify and hold harmless COUNTY, its elected or appointed officials, employees or volunteers against any claims, actions, or demands against them, or any of them, and against any damages, liabilities or expenses, including costs of defense and attorney's fees, for personal injury or death, or for the loss or damage to the property, or any or all of them, to the extent arising out of negligent acts, errors and omissions in performance of this Agreement by CONSULTANT, but only to the extent CONSULTANT is determined to be culpable by a count of competent jurisdiction, including same apportionment to County's legal\defense costs.

CONSULTANT affirms that s/he is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for the Workers' Compensation or to undertake self insurance in accordance with the provisions of the Code and CONSULTANT further assures that s/he will comply with such provisions before commencing the performance of work under this Agreement. CONSULTANT shall furnish to COUNTY certificate(s) of insurance evidencing Worker's Compensation Insurance coverage to cover its employees, and CONSULTANT shall require all subconsultants similarly to provide Workers' Compensation Insurance as required by the Labor Code of the State of California for all of CONSULTANT'S and subconsultants' employees.

CONSULTANT shall furnish to COUNTY certificates of insurance with Automobile Liability/General Liability/Professional Liability Endorsements evidencing at a minimum the following:

- a. Combined single limit bodily injury liability and property damage liability \$1,000,000 each occurrence.
- b. Vehicle / Bodily Injury combined single limit vehicle bodily injury and property damage liability \$500,000 each occurrence.
- c. Professional Liability coverage \$1,000,000 per claim.

[END OF INSURANCE REQUIREMENTS]