CONTRACT MA-080-22010121

FOR

WATER QUALITY ANALYTICAL SERVICES

BETWEEN

OC PUBLIC WORKS

AND

PHYSIS ENVIRONMENTAL LABORATORIES, INC.



CONTRACT MA-080-22010121 WITH PHYSIS ENVIRONMENTAL LABORATORIES, INC. FOR WATER QUALITY ANALYTICAL SERVICES

THIS CONTRACT **MA-080-22010121** for Water Quality Analytical Services ("Contract") is made and entered into as of the date fully executed by and between the County of Orange, a political subdivision of the State of California, ("County") and Physis Environmental Laboratories, Inc., with a place of business at 1904 East Wright Circle, Anaheim, CA 92806 ("Contractor"), with a County and Contractor sometimes referred to as "Party" or collectively as "Parties."

ATTACHMENTS

This Contract is comprised of this document and the following Attachments, which are attached hereto and incorporated by reference in this Contract:

Attachment A – Scope of Work

Attachment B – Payment/Compensation

Attachment C – Staffing Plan

Attachment D – Format for Analytical Services Invoicing

Attachment E – Format for Electronic Data Report (EDR) of Analytical Results

Attachment F – Format for Electronic Analytical Services Invoicing

Attachment G – Format for Analysis Details Report

RECITALS

WHEREAS, Contractor and County are entering into this Contract for Water Quality Analytical Services under a firm fixed fee Contract; and,

WHEREAS, County solicited Contract for Water Quality Analytical Services as set forth herein, and Contractor represented that it is qualified to provide Water Quality Analytical Services to the County as further set forth here; and,

WHEREAS, Contractor agrees to provide Water Quality Analytical Services to the County as further set forth in the Scope of Work, attached hereto as Attachment A; and,

WHEREAS, County agrees to pay Contractor based on the schedule of fees set forth in Payment/Compensation, attached hereto as Attachment B; and,

WHEREAS, the County Board of Supervisors has authorized the Procurement Officer or designee to enter into a Contract for Water Quality Analytical Services with the Contractor; and,

NOW, THEREFORE, the Parties mutually agree as follows:

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DEFINITIONS

DPA shall mean the Deputy Purchasing Agent assigned to this Contract.

ARTICLES

General Terms and Conditions:

- A. **Governing Law and Venue**: This Contract has been negotiated and executed in the state of California and shall be governed by and construed under the laws of the state of California. In the event of any legal action to enforce or interpret this Contract, the sole and exclusive venue shall be a court of competent jurisdiction located in Orange County, California, and the parties hereto agree to and do hereby submit to the jurisdiction of such court, notwithstanding Code of Civil Procedure Section 394. Furthermore, the parties specifically agree to waive any and all rights to request that an action be transferred for adjudication to another county.
- B. Entire Contract: This Contract contains the entire Contract between the parties with respect to the matters herein, and there are no restrictions, promises, warranties or undertakings other than those set forth herein or referred to herein. No exceptions, alternatives, substitutes or revisions are valid or binding on County unless authorized by County in writing. Electronic acceptance of any additional terms, conditions or supplemental Contracts by any County employee or agent, including but not limited to installers of software, shall not be valid or binding on County unless accepted in writing by County's Procurement Officer or designee.
- C. **Amendments:** No alteration or variation of the terms of this Contract shall be valid unless made in writing and signed by the parties; no oral understanding or agreement not incorporated herein shall be binding on either of the parties; and no exceptions, alternatives, substitutes or revisions are valid or binding on County unless authorized by County in writing.
- D. **Taxes:** Unless otherwise provided herein or by law, price quoted does not include California state sales or use tax. Out-of-state Contractors shall indicate California Board of Equalization permit number and sales permit number on invoices, if California sales tax is added and collectable. If no permit numbers are shown, sales tax will be deducted from payment. The Auditor-Controller will then pay use tax directly to the State of California in lieu of payment of sales tax to the Contractor.
- E. **Delivery:** Time of delivery of goods or services is of the essence in this Contract. County reserves the right to refuse any goods or services and to cancel all or any part of the goods not conforming to applicable specifications, drawings, samples or descriptions or services that do not conform to the prescribed statement of work. Acceptance of any part of the order for goods shall not bind County to accept future shipments nor deprive it of the right to return goods already accepted at Contractor's expense. Over shipments and under shipments of goods shall be only as agreed to in writing by County. Delivery shall not be deemed to be complete until all goods or services have actually been received and accepted in writing by County.
- F. Acceptance Payment: Unless otherwise agreed to in writing by County; 1) acceptance shall not be deemed complete unless in writing and until all the goods/services have actually been received, inspected, and tested to the satisfaction of County, and 2) payment shall be made in arrears after satisfactory acceptance.

- G. **Warranty:** Contractor expressly warrants that the goods covered by this Contract are 1) free of liens or encumbrances, 2) merchantable and good for the ordinary purposes for which they are used, and 3) fit for the particular purpose for which they are intended. Acceptance of this order shall constitute an agreement upon Contractor's part to indemnify, defend and hold County and its indemnities as identified in **article "Z"** below, and as more fully described in **article "Z**," harmless from liability, loss, damage and expense, including reasonable counsel fees, incurred or sustained by County by reason of the failure of the goods/services to conform to such warranties, faulty work performance, negligent or unlawful acts, and non-compliance with any applicable state or federal codes, ordinances, orders, or statutes, including the Occupational Safety and Health Act (OSHA) and the California Industrial Safety Act. Such remedies shall be in addition to any other remedies provided by law.
- H. **Patent/Copyright Materials/Proprietary Infringement:** Unless otherwise expressly provided in this Contract, Contractor shall be solely responsible for clearing the right to use any patented or copyrighted materials in the performance of this Contract. Contractor warrants that any software as modified through services provided hereunder will not infringe upon or violate any patent, proprietary right, or trade secret right of any third party. Contractor agrees that, in accordance with the more specific requirement contained in **article** "**Z**" below, it shall indemnify, defend and hold County and County Indemnitees harmless from any and all such claims and be responsible for payment of all costs, damages, penalties and expenses related to or arising from such claim(s), including, costs and expenses but not including attorney's fees.
- I. **Assignment:** The terms, covenants, and conditions contained herein shall apply to and bind the heirs, successors, executors, administrators and assigns of the parties. Furthermore, neither the performance of this Contract nor any portion thereof may be assigned by Contractor without the express written consent of County. Any attempt by Contractor to assign the performance or any portion thereof of this Contract without the express written consent of County shall be invalid and shall constitute a breach of this Contract.
- J. **Non-Discrimination:** In the performance of this Contract, Contractor agrees that it will comply with the requirements of Section 1735 of the California Labor Code and not engage nor permit any subcontractors to engage in discrimination in employment of persons because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, or sex of such persons. Contractor acknowledges that a violation of this provision shall subject Contractor to penalties pursuant to Section 1741 of the California Labor Code.
- K. **Termination:** In addition to any other remedies or rights it may have by law, County has the right to immediately terminate this Contract without penalty for cause or after 30 days' written notice without cause, unless otherwise specified. Cause shall be defined as any material breach of contract, any misrepresentation or fraud on the part of the Contractor. Exercise by County of its right to terminate the Contract shall relieve County of all further obligation.

In the event of change of control, to the extent necessary, Contractor shall provide reasonably requested assistance in the transferring of services.

L. **Consent to Breach Not Waiver:** No term or provision of this Contract shall be deemed waived and no breach excused, unless such waiver or consent shall be in writing and signed by the party claimed to have waived or consented. Any consent by any party to, or waiver of, a breach by the other, whether express or implied, shall not constitute consent to, waiver of, or excuse for any other different or subsequent breach.

- M. **Independent Contractor:** Contractor shall be considered an independent contractor and neither Contractor, its employees, nor anyone working under Contractor shall be considered an agent or an employee of County. Neither Contractor, its employees nor anyone working under Contractor shall qualify for workers' compensation or other fringe benefits of any kind through County.
- N. **Performance Warranty:** Contractor shall warrant all work under this Contract, taking necessary steps and precautions to perform the work to County's satisfaction. Contractor shall be responsible for the professional quality, technical assurance, timely completion and coordination of all documentation and other goods/services furnished by the Contractor under this Contract. Contractor shall perform all work diligently, carefully, and in a good and workmanlike manner; shall furnish all necessary labor, supervision, machinery, equipment, materials, and supplies, shall at its sole expense obtain and maintain all permits and licenses required by public authorities, including those of County required in its governmental capacity, in connection with performance of the work. If permitted to subcontract, Contractor shall be fully responsible for all work performed by subcontractors.
- O. **Insurance Requirements:** Prior to the provision of services under this Contract, the Contractor agrees to purchase all required insurance at Contractor's expense, including all endorsements required herein, necessary to satisfy the County that the insurance provisions of this Contract have been complied with. Contractor agrees to keep such insurance coverage, Certificates of Insurance, and endorsements on deposit with the County during the entire term of this Contract. In addition, all subcontractors performing work on behalf of Contractor pursuant to this Contract shall obtain insurance subject to the same terms and conditions as set forth herein for Contractor.

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

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

- 1. In addition to the duty to indemnify and hold the County harmless against any and all liability, claim, demand or suit resulting from Contractor's, its agents, employee's or subcontractor's performance of this Contract, Contractor shall defend the County at its sole cost and expense with counsel approved by Board of Supervisors against same; and
- 2. Contractor's duty to defend, as stated above, shall be absolute and irrespective of any duty to indemnify or hold harmless; and

3. The provisions of California Civil Code Section 2860 shall apply to any and all actions to which the duty to defend stated above applies, and the Contractor's SIR provision shall be interpreted as though the Contractor was an insurer and the County was the insured.

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

Qualified Insurer

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

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

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

Coverage	Minimum Limits
Commercial General Liability	\$1,000,000 per occurrence \$2,000,000 aggregate
Automobile Liability including coverage for owned, non-owned and hired vehicles	\$1,000,000 per occurrence
Workers Compensation	Statutory
Employers Liability Insurance	\$1,000,000 per occurrence
Professional Liability	\$1,000,000 per claims-made \$1,000,000 aggregate)

Required Coverage Forms

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

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

Required Endorsements

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

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

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

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

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

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

The Commercial General Liability policy shall contain a "Severability of Interests" clause also known as a "Separation of Insureds" clause (standard in the ISO CG 0001 policy).

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

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

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

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

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

P. **Changes:** Contractor shall make no changes in the work or perform any additional work without the County's specific written approval.

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

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

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

In addition, Contractor has the duty to notify the County in writing of any change in the Contractor's status with respect to name changes that do not require an assignment of the Contract. The Contractor is also obligated to notify the County in writing if the Contractor becomes a party to any litigation against the County, or a party to litigation that may reasonably affect the Contractor's performance under the Contract, as well as any potential conflicts of interest between Contractor and County that may arise prior to or during the period of Contract performance. While Contractor will be required to provide this information without prompting from the County any time there is a change in Contractor's name, conflict of interest or litigation status, Contractor must also provide an update to the County of its status in these areas whenever requested by the County.

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

- R. **Force Majeure:** Contractor shall not be assessed with liquidated damages or unsatisfactory performance penalties during any delay beyond the time named for the performance of this Contract caused by any act of God, war, civil disorder, employment strike or other cause beyond its reasonable control, provided Contractor gives written notice of the cause of the delay to County within 36 hours of the start of the delay and Contractor avails himself of any available remedies.
- S. **Confidentiality:** Contractor agrees to maintain the confidentiality of all County and Countyrelated records and information pursuant to all statutory laws relating to privacy and confidentiality that currently exist or exist at any time during the term of this Contract. All such records and information shall be considered confidential and kept confidential by Contractor and Contractor's staff, agents and employees.
- T. **Compliance with Laws:** Contractor represents and warrants that services to be provided under this Contract shall fully comply, at Contractor's expense, with all standards, laws, statutes, restrictions, ordinances, requirements, and regulations (collectively "laws"), including, but not

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Page 8 of 58 File No.: 2100802 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 "Z**,", Contractor agrees that it shall defend, indemnify and hold County and County INDEMNITEES harmless from all liability, damages, costs and expenses arising from or related to a violation of such laws.

- U. **Freight:** Prior to the County's express acceptance of delivery of products. Contractor assumes full responsibility for all transportation, transportation scheduling, packing, handling, insurance, and other services associated with delivery of all products deemed necessary under this Contract.
- V. **Severability:** If any term, covenant, condition or provision of this Contract is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder of the provisions hereof shall remain in full force and effect and shall in no way be affected, impaired or invalidated thereby.
- W. **Attorney Fees:** In any action or proceeding to enforce or interpret any provision of this Contract, each party shall bear their own attorney's fees, costs and expenses.
- X. Interpretation: This Contract has been negotiated at arm's length and between persons sophisticated and knowledgeable in the matters dealt with in this Contract. In addition, each party had been represented by experienced and knowledgeable independent legal counsel of their own choosing or has knowingly declined to seek such counsel despite being encouraged and given the opportunity to do so. Each party further acknowledges that they have not been influenced to any extent whatsoever in executing this Contract by any other party hereto or by any person representing them, or both. Accordingly, any rule or law (including California Civil Code Section 1654) or legal decision that would require interpretation of any ambiguities in this Contract shall be interpreted in a reasonable manner to effect the purpose of the parties and this Contract.
- Y. **Employee Eligibility Verification:** The Contractor warrants that it fully complies with all Federal and State statutes and regulations regarding the employment of aliens and others and that all its employees performing work under this Contract meet the citizenship or alien status requirement set forth in Federal statutes and regulations. The Contractor shall obtain, from all employees performing work hereunder, all verification and other documentation of employment eligibility status required by Federal or State statutes and regulations including, but not limited to, the Immigration Reform and Control Act of 1986, 8 U.S.C. §1324 et seq., as they currently exist and as they may be hereafter amended. The Contractor shall retain all such documentation for all covered employees for the period prescribed by the law. The Contractor shall indemnify, defend with counsel approved in writing by County, and hold harmless, the County, its agents, officers, and employees from employer sanctions and any other liability which may be assessed against the Contractor or the County or both in connection with any alleged violation of any Federal or State statutes or regulations pertaining to the eligibility for employment of any persons performing work under this Contract.
- Z. Indemnification: Contractor agrees to indemnify, defend with counsel approved in writing by County, and hold County, its elected and appointed officials, officers, employees, agents and those special districts and agencies which County's Board of Supervisors acts as the governing Board ("County Indemnitees") harmless from any claims, demands or liability of any kind or nature, including but not limited to personal injury or property damage, arising from or related to the services, products or other performance provided by Contractor pursuant to this Contract. If judgment is entered against Contractor and County by a court of competent jurisdiction because of

County of Orange OC Public Works MA-080-22010121 Water Quality Analytical Services Page 9 of 58 File No.: 2100802 the concurrent active negligence of County or County Indemnitees, Contractor and County agree that liability will be apportioned as determined by the court. Neither party shall request a jury apportionment.

AA. Audits/Inspections: Contractor agrees to permit the County's Auditor-Controller or the Auditor-Controller's authorized representative (including auditors from a private auditing firm hired by the County) access during normal working hours to all books, accounts, records, reports, files, financial records, supporting documentation, including payroll and accounts payable/receivable records, and other papers or property of Contractor for the purpose of auditing or inspecting any aspect of performance under this Contract. The inspection and/or audit will be confined to those matters connected with the performance of the Contract including, but not limited to, the costs of administering the Contract. The County will provide reasonable notice of such an audit or inspection.

The County reserves the right to audit and verify the Contractor's records before final payment is made.

Contractor agrees to maintain such records for possible audit for a minimum of three years after final payment, unless a longer period of records retention is stipulated under this Contract or by law. Contractor agrees to allow interviews of any employees or others who might reasonably have information related to such records. Further, Contractor agrees to include a similar right to the County to audit records and interview staff of any subcontractor related to performance of this Contract.

Should the Contractor cease to exist as a legal entity, the Contractor's records pertaining to this Contract shall be forwarded to the County's project manager.

- BB. **Contingency of Funds:** Contractor acknowledges that funding or portions of funding for this Contract may be contingent upon state budget approval; receipt of funds from, and/or obligation of funds by, the state of California to County; and inclusion of sufficient funding for the services hereunder in the budget approved by County's Board of Supervisors for each fiscal year covered by this Contract. If such approval, funding or appropriations are not forthcoming, or are otherwise limited, County may immediately terminate or modify this Contract without penalty.
- CC. **Expenditure Limit:** The Contractor shall notify the County of Orange assigned DPA in writing when the expenditures against the Contract reach 75 percent of the dollar limit on the Contract. The County will not be responsible for any expenditure overruns and will not pay for work exceeding the dollar limit on the Contract unless a change order to cover those costs has been issued.

Additional Terms and Conditions:

- 1. **Scope of Contract:** This Contract specifies the contractual terms and conditions by which the County will procure Water Quality Analytical Services from Contractor as further detailed in the Scope of Work, identified and incorporated herein by this reference as "Attachment A".
- 2. **Term of Contract:** This Contract shall commence upon execution of all necessary signatures and continue for three (3) calendar years from that date, unless otherwise terminated by County. This Contract may be renewed for two (2) additional years, 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 County Board of Supervisors approval.

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- 3. Adjustments Scope of Work: No adjustments made to the Scope of Work will be authorized without prior written approval of the County assigned DPA.
- 4. **Aggregate Contract:** This is an Aggregate Contract with ALS Group USA, Corp. Which Will Do Business in California As Columbia Analytical Services, Inc., Enthalpy Analytical, LLC, Physis, Environmental Laboratories, Inc., and Weck Analytical Environmental Services, Inc. with a Total Aggregate Contract Amount not to exceed **\$3,210,000.00**.
- 5. **Breach of Contract:** The failure of the Contractor to comply with any of the provisions, covenants or conditions of this Contract shall be a material breach of this Contract. In such event the County may, and in addition to any other remedies available at law, in equity, or otherwise specified in this Contract:
 - a. Terminate the Contract immediately, pursuant to Section K herein;
 - b. Afford the Contractor written notice of the breach and ten (10) calendar days or such shorter time that may be specified in this Contract within which to cure the breach;
 - c. Discontinue payment to the Contactor for and during the period in which the Contractor is in breach; and
 - d. Offset against any monies billed by the Contractor but yet unpaid by the County those monies disallowed pursuant to the above.
- 6. **Civil Rights:** Contractor attests that services provided shall be in accordance with the provisions of Title VI and Title VII of the Civil Rights Act of 1964, as amended, Section 504 of the Rehabilitation Act of 1973, as amended; the Age Discrimination Act of 1975 as amended; Title II of the Americans with Disabilities Act of 1990, and other applicable State and federal laws and regulations prohibiting discrimination on the basis of race, color, national origin, ethnic group identification, age, religion, marital status, sex or disability.
- 7. **Conflict of Interest Contractor's Personnel:** 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 subcontractors associated with accomplishing work and services hereunder. The Contractor's efforts shall include, but not be limited to establishing precautions to prevent its employees, agents, and subcontractors from providing or offering gifts, entertainment, payments, loans or other considerations which could be deemed to influence or appear to influence County staff or elected officers from acting in the best interests of the County.
- 8. **Conflict of Interest County Personnel:** 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.
- 9. **Contractor's Project Manager and Key Personnel:** Contractor shall appoint a Project Manager to direct the Contractor's efforts in fulfilling Contractor's obligations under this Contract. This Project Manager shall be subject to approval by the County and shall not be changed without the written consent of the County's Project Manager, which consent shall not be unreasonably withheld.

The Contractor's Project Manager shall be assigned to this project for the duration of the Contract and shall diligently pursue all work and services to meet the project time lines. The County's Project Manager shall have the right to require the removal and replacement of the Contractor's Project Manager from providing services to the County under this Contract. The County's Project manager shall notify the Contractor in writing of such action. The Contractor shall accomplish the removal within five (5) business days after written notice by the County's Project Manager. The County's Project Manager shall review and approve the appointment of the replacement for the Contractor's Project Manager. The County is not required to provide any additional information, reason or rationale in the event it requires the removal of Contractor's Project Manager from providing further services under the Contract.

- 10. **Contractor's Expense:** The Contractor will be responsible for all costs related to photo copying, telephone communications, fax communications, and parking while on County sites during the performance of work and services under this Contract. The County will not provide free parking for any service in the County Civic Center.
- 11. **Contractor Personnel Uniform/Badges/Identification:** 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 under this Contract.

All Contractor's employees shall be required to wear uniforms, badges, or other means of identification which are to be furnished by the Contractor and must be worn at all times while working on County property. The assigned DPA must be notified in writing, within seven (7) 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 (7) days prior to any changes in this procedure.

- 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. Cooperative Agreement: The provisions and pricing of this Contract will be extended to other California local or state governmental entities. Governmental entities wishing to use the prenegotiated prices and terms in this Contract will be responsible for issuing their own purchase documents/contracts, providing for their own acceptance, and making any subsequent payments. Contractor shall be required to include in any contract entered into with another department or entity that is entered into and incorporates by reference the pre-negotiated prices and terms of this Contract a contractual clause that will hold harmless the County of Orange from all claims, demands, actions or causes of actions of every kind resulting directly or indirectly, arising out of, or in any way connected with the use of this Contract. Failure to do so will be considered a material breach of this Contract by Contractor and grounds for immediate Contract termination. Departments or entities making use of the pre-negotiated prices and terms of this Contract are responsible for obtaining all certificates of insurance and bonds required when entering into their own contract. The Contractor is responsible for providing each cooperative entity a copy of the Contract upon request by the cooperative entity. The County of Orange makes no guarantee of usage by other users of this Contract.

County of Orange OC Public Works MA-080-22010121 Water Quality Analytical Services Page 12 of 58 File No.: 2100802 The Contractor shall be required to maintain a list of the cooperative entities using this Contract. The list shall report dollar volumes spent annually and shall be provided on an annual basis to the County, at the County's request.

- 14. **Data Title To:** All materials, documents, data or information obtained from the County data files or any County medium furnished to the Contractor in the performance of this Contract will at all times remain the property of the County. Such data or information may not be used or copied for direct or indirect use by the Contractor after completion or termination of this Contract without the express written consent of the County. All materials, documents, data or information, including copies, must be returned to the County at the end of this Contract.
- 15. **Default Reprocurement Costs:** In case of Contract breach by Contractor, resulting in termination by the County, the County may procure the goods and/or services from other sources. If the cost for those goods and/or services is higher than under the terms of the existing Contract, Contractor will be responsible for paying the County the difference between the Contract cost and the price paid, and the County may deduct this cost from any unpaid balance due the Contractor. The price paid by the County shall be the prevailing market price at the time such purchase is made. This is in addition to any other remedies available under this Contract and under law.
- 16. **Disputes Contract:** 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, as specified in Article 22. "Notices," such matter shall be brought to the attention of the County DPA by way of the following process:
 - a. The Contractor shall submit to the agency/department assigned 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.

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 or his designee. If the County fails to render a decision within 90 days after receipt of the Contractor's demand, it shall be deemed a final decision adverse to the Contractor's contentions. Nothing in this section shall be construed as affecting the County's right to terminate the Contract for cause or termination for convenience as stated in Article K herein.

17. **Drug-Free Workplace:** The Contractor hereby certifies compliance with Government Code Section 8355 in matters relating to providing a drug-free workplace. The Contractor will:

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- a. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations, as required by Government Code Section 8355(a)(1).
- b. Establish a drug-free awareness program as required by Government Code Section 8355(a)(2) to inform employees about all of the following:
 - i. The dangers of drug abuse in the workplace;
 - ii. The organization's policy of maintaining a drug-free workplace;
 - iii. Any available counseling, rehabilitation and employee assistance programs; and
 - iv. Penalties that may be imposed upon employees for drug abuse violations.
- c. Provide as required by Government Code Section 8355(a)(3) that every employee who works under this Contract:
 - i. Will receive a copy of the company's drug-free policy statement; and
 - ii. Will agree to abide by the terms of the company's statement as a condition of employment under this Contract.

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

- 1. The Contractor has made false certification, or
- 2. The Contractor violates the certification by failing to carry out the requirements as noted above.
- 18. **EDD Independent Contractor Reporting Requirements:** Effective January 1, 2001, the County of Orange is required to file in accordance with subdivision (a) of Section 6041A of the Internal Revenue Code 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, subarticle 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.

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Page 14 of 58 File No.: 2100802 Additional information on this reporting requirement can be found at the California Employment Development Department web site located at <u>http://www.edd.ca.gov/Employer_Services.htm</u>

- 19. Errors and Omissions: All reports, files and other documents prepared and submitted by Contractor shall be complete and shall be carefully checked by the professional(s) identified by Contractor as project manager and key personnel attached hereto, prior to submission to the County. Contractor agrees that County review is discretionary, and Contractor shall not assume that the County will discover errors and/or omissions. If the County discovers any errors or omissions prior to approving Contractor's reports, files and other written documents, the reports, files or documents will be returned to Contractor for correction. Should the County or others discover errors or omissions in the reports, files or other written documents submitted by the Contractor after County approval thereof, County approval of Contractor's reports, files or documents shall not be used as a defense by Contractor in any action between the County and Contractor, and the reports, files or documents will be returned to Contractor for correction.
- 20. Equal Employment Opportunity: The Contractor shall comply with U.S. Executive Order 11246 entitled, "Equal Employment Opportunity" as amended by Executive Order 11375 and as supplemented in Department of Labor regulations (41 CFR, Part 60) and applicable state of California regulations as may now exist or be amended in the future. The Contractor shall not discriminate against any employee or applicant for employment on the basis of race, color, national origin, ancestry, religion, sex, marital status, political affiliation or physical or mental condition.

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

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

- 21. **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.
- 22. **Notices:** Any and all notices, requests demands and other communications contemplated, called for, permitted, or required to be given hereunder shall be in writing with a copy provided to the assigned DPA, except through the course of the parties' project managers' routine exchange of information and cooperation during the terms of the work and services. Any written communications shall be deemed to have been duly given upon actual in-person delivery, if

County of Orange OC Public Works MA-080-22010121 Water Quality Analytical Services Page 15 of 58 File No.: 2100802 delivery is by direct hand, or upon delivery on the actual day of receipt or no greater than four (4) calendar days after being mailed by US certified or registered mail, return receipt requested, postage prepaid, whichever occurs first. The date of mailing shall count as the first day. All communications shall be addressed to the appropriate party at the address stated herein or such other address as the parties hereto may designate by written notice from time to time in the manner aforesaid.

Contractor:	Physis Environmental Laboratories, Inc. Attn: Rachel Hansen/Project Manager 1904 East Wright Circle Anaheim, CA 92806 Phone: 714-602-5320 Email: rachelhansen@physislabs.com
County's Project Manager:	OC Public Works/OC Environmental Resources Attn: Jian Peng/Project Manager 2301 North Glassell St. Orange, CA 92865 Phone: 714-955-0650 Email: jian.peng@ocpw.ocgov.com
	OC Public Works/OC Environmental Resources Attn: Stuart Goong/Project Manager 2301 N. Glassell St. Orange, CA 92865 Phone: 714-955-0656 Email: stuart.goong@ocpw.ocgov.com
cc:	OC Public Works/Procurement Services Attn: Carlos Corona, County DPA 601 North Ross Street Santa Ana, CA 92701 Phone: 714-667-9694

- Email: carlos.corona@ocpw.ocgov.com
- 23. **Parking for Delivery Services:** The County of Orange will not provide free parking for delivery services.
- 24. **Precedence:** The Contract documents consist of this Contract and its exhibits 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 exhibits and attachments.
- 25. **Project Manager, County:** The County shall appoint a project manager to act as liaison between the County and the Contractor during the term of this Contract. The County's project manager 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. The County's project manager shall notify the

County of Orange OC Public Works MA-080-22010121 Water Quality Analytical Services Page 16 of 58 File No.: 2100802 Contractor in writing of such action. The Contractor shall accomplish the removal within three (3) business days after written notice from the County's project manager. The County's project manager shall review and approve the appointment of the replacement for the Contractor's project manager and key personnel. Said approval shall not be unreasonably withheld. The County is not required to provide any additional information, reason or rationale in the event it requires the removal of Contractor's Project Manager from providing further services under the Contract.

- 26. **Reports/Meetings:** 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.
- 27. **Safety Data Sheets (SDS):** The Contractor is required to provide a completed Safety Data Sheet (SDS) for each hazardous substance provided to the County under the Contractor's Contract with the County. This includes hazardous substances that are not directly included in the Contract, but are included in the goods or services provided by the Contractor to the County. The provision of the SDSs must be in accordance with the requirements of California Labor Code Sections 6380 through 6399, General Industry Safety Order Section 5194, and Title 8, California Code of Regulations. The SDSs for each substance must be sent to the place of shipment or provision of goods/service.
- 28. **Subcontracting:** No performance of this Contract or any portion thereof may be subcontracted by the Contractor without the express written consent of the County. Any attempt by the Contractor to subcontract any performance of this Contract without the express written consent of the County shall be invalid and shall constitute a breach of this Contract.

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

- 29. **Termination Orderly:** After receipt of a termination notice from the County of Orange, the Contractor may submit to the County a termination claim, if applicable. Such claim shall be submitted promptly, but in no event later than 60 days from the effective date of the termination, unless one or more extensions in writing are granted by the County upon written request of the Contractor. Upon termination County agrees to pay the Contractor for all services performed prior to termination which meet the requirements of the Contract, provided, however, that such compensation combined with previously paid compensation shall not exceed the total compensation set forth in the Contract. Upon termination or other expiration of this Contract, each party shall promptly return to the other party all papers, materials, and other properties of the other held by each for purposes of performance of the Contract.
- 30. **Usage:** No guarantee is given by the County to the Contractor regarding usage of this Contract. Usage figures, if provided, are approximations. The Contractor agrees to supply services and/or commodities requested, as needed by the County of Orange, at rates/prices listed in the Contract, regardless of quantity requested.

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- 31. **Usage Reports:** The Contractor shall submit usage reports on an annual basis to the assigned DPA of the County of Orange user agency/department. The usage report shall be in a format specified by the user agency/department and shall be submitted 90 days prior to the expiration date of the contract term, or any subsequent renewal term, if applicable.
- 32. **County of Orange Local Small Business Preference Requirements:** Contractor certifies it is in compliance with County of Orange Local Small Business Preference requirements at the time this contract is executed.
- 33. **Disabled Veteran Business Enterprise Preference Requirements:** Contractor certifies it is in compliance with County of Orange Disabled Veteran Business Enterprise Preference requirements at the time this Contract is executed.
- 34. **Delivery Location No Loading Dock:** Delivery locations may not have loading docks. The Contractor is required to make all necessary arrangements for lift trucks or other means necessary to complete delivery. Inside delivery to secured facilities may be required.
- 35. **Publication:** No copies of sketches, schedules, written documents, computer based data, photographs, maps or graphs, including graphic art work, resulting from performance or prepared in connection with this Contract, are to be released by Contractor and/or anyone acting under the supervision of Contractor to any person, partnership, company, corporation, or agency, without prior written approval by the County, except as necessary for the performance of the services of this Contract. All press contacts, including graphic display information to be published in newspapers, magazines, etc., are to be administered only after County approval.
- 36. **Health and Safety Provisions:** Caution shall be exercised at all times for the protection of persons, including employees, and property. The safety provisions of applicable laws and building and construction codes shall be observed. Work, materials, and equipment used, shall comply with the Occupational Safety & Health Administration (OSHA) requirements, and federal and state safety orders.

The Contractor shall have (at the work site) copies of, or suitable extracts of, "General Industry Safety Orders" issued by the California State Division of Industrial Safety. The Contractor shall comply with the provisions of these and all other applicable laws, ordinances, and regulations.

Signature Page Follows

Attachment C

Signature Page

IN WITNESS WHEREOF, the Parties hereto have executed this Contract on the date following their respective signatures.

PHYSIS ENVIRONMENTAL LABORATORIES, INC.*

Mark D. Baker	Mark D. Baker	President	9/14/2021
Signature	Name	Title	Date
Richard W. Gossett	Richard W. Gossett	Secretary	9/14/2021
Signature	Name	Title	Date

COUNTY OF ORANGE, A political subdivision of the State of California COUNTY AUTHORIZED SIGNATURE:

			Deputy Purchasing A	Agent
Signatu	re	Name	Title	Date
	VED AS TO FORM: Counsel			
By:	William Mirli			
_) ·	Depu	uty		
Name:	william Ninh			
Date:	9/16/2021			

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

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ATTACHMENT A SCOPE OF WORK

- I. BACKGROUND: OC Public Works (County) manages multiple water quality monitoring programs for the Orange County Stormwater Program on behalf of the County of Orange, Orange County Flood Control District, and the 34 cities of Orange County in response to regulatory requirements for the National Pollutant Discharge Elimination System permits, adopted Total Maximum Daily Load directives, and various other environmental management initiatives. County collects aqueous, benthic sediment, and tissue samples from freshwater, estuarine, and marine environments to evaluate concentrations of a variety of constituents in response to regulatory requirements including but not limited to;
 - A. Federal NPDES stormwater permits, *Code of Federal Regulations, Title 40, Part 122.*
 - B. State NPDES stormwater permits, Orders R8-2009-0030 and R9-2013-0001 (amended by R9-2015-0001), subsequent revisions, and new permits that replace these permits.
 - C. State requirements for Total Maximum Daily Load directives, *Code of Federal Regulations, Title 40, Part 130.*
 - D. Local mandates under the Model Water Quality Ordinance, Orange County Board of Supervisors Ordinance 536 and subsequent revisions.
 - E. Waste Discharge Requirements for discharges to surface waters associated with construction project dewatering under various applicable orders including, but not limited to, *California Water Code 13260, NPDES Order R8-2007-0041 (amended R8-2009-0045), R8-2009-0030 (amended R8-2010-0062), R8-2015-0004, R9-2008-0002, R9-2015-0013.*
 - F. Clean Water Act Section 401 Water Quality Standards Certification, NPDES Order R8-2007-0041 (amended R8-2009-0045), R9-2009-0002, R9-2013-0001 (amended R9-2015-0001), SWRCB Order 2003-0017-DWQ, and subsequent revisions.
 - G. Disposal of dredge and fill materials, SWCRB Order 2003-0017-DWQ, Army Corp of Engineers Clean Water Act Section 404 permits, and subsequent revisions.
 - H. State NPDES permit for residual aquatic pesticide discharges to surface waters from algae and aquatic weed control applications, *NPDES Order 2013-0002-DWQ and subsequent revisions*.

Analytical services for the water quality samples collected as part of the monitoring programs to fulfill these regulatory mandates are to be provided by State of California Environmental Laboratory Accreditation Program (ELAP) certified laboratories under contract to County.

County participates in a number of regional programs in collaboration with governmental, nonprofit public institutions, universities, regulatory, and special districts where laboratory intercalibrations have been applied to assess the analytical laboratory community as a whole. The regional program inter-calibration projects help ensure data comparability, sensitivity, and precision between agencies and programs but also help establish minimum performance standards for the various agencies in response to regulatory guidelines. Some of the recent inter-calibration programs that vendors to County have participated in include:

1. The Stormwater Monitoring Coalition (SMC) Laboratory Inter-Calibration. The SMC is a coalition of the regulatory and regulated agencies in southern California

working together to develop common approaches and management expectations for dealing with issues related to municipal stormwater management.

- 2. The Southern California Bight Regional Marine Monitoring Program (Bight), coordinated by the Southern California Coastal Water Research Project. The Bight program is a coordinated periodic large scale environmental assessment of the southern California coastal environment focusing on current and emerging issues of concern in the watersheds, embayments, and ocean receiving waters. Environmental monitoring programs from governmental, non-profit public institutions, Federal and State regulatory agencies, universities, and the major special districts managing Publicly Owned Treatment Works (POTW) ocean outfalls are integrated in the Bight program to leverage existing resources for regional scale assessments.
- **II. SCOPE OF SERVICES:** Contractor shall provide Water Quality Analytical Services to County on an as needed basis.
 - A. Contractor will be required to provide analytical services for one or more of the following categories of environmental samples
 - 1. Nutrients in freshwater and seawater,
 - 2. Trace metals in freshwater,
 - 3. Trace metals in seawater,
 - 4. Pesticides in freshwater, seawater, and tissue,
 - 5. Organic compounds and trace metals in sediment and tissue,
 - 6. Toxics in tissues (fish tissue and bird eggs)
 - 7. Miscellaneous analyses include, but are not limited to:
 - a. Oil and Grease, Partition Gravimetric (OGPG)
 - b. Total Recoverable Petroleum Hydrocarbons (TRPH)
 - c. Total Dissolved Solids (TDS)
 - d. Total and Dissolved Organic Carbon (TOC and DOC)
 - e. Rainwater chemistry (RAIN)
 - f. General Minerals (GM)
 - g. Total Suspended Solids (TSS)
 - h.Methylene Blue Active Substances (MBAS)
 - i. Carbonaceous Biochemical, Biochemical, and Chemical Oxygen Demand (cBOD, BOD, and COD)

Acceptable methods of analyses for constituents within each category shall meet the requirements of Section III.A.17.

III. GENERAL REQUIREMENTS

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- A. <u>Contractor Shall</u>:
 - 1. Be a qualified laboratory, meeting requirements for certification by the California State Water Resources Control Board Environmental Laboratory Accreditation Program (ELAP),
 - 2. Participate in regional program intercalibration exercises for all relevant proposed laboratory testing services. Continued usage of analytical services from Contractor is contingent upon Contractor's participation in future SMC or Bight intercalibration exercises during the Contract term.
 - 3. Be fully equipped and staffed, at a level capable of providing all analytical services.
 - 4. Cover all fees related to labor, courier services, materials (coolers, sample containers (cubitainers), jars, etc.), special equipment and permits (where applicable) needed to provide analytical services.
 - 5. Provide a 24-hour contact number or answering service.
 - 6. Provide regularly scheduled and on-demand sample pickup within the required holding times.
 - a. Scheduled pick-up is defined as a minimum 6-hour advanced notice by County personnel.
 - b.On-demand pick-up, typically 3-4 samples, is defined as a 2-hour advanced notice by County personnel for analysis of a sample on the following day.
 - 7. Upon County request; pick up and deliver samples in quantity adequate for analysis at: 2245 North Glassell St., Orange, CA 92865
 - 8. Provide weekend service and operate at extended hours when necessary for sample pick-up and preliminary analyses.
 - 9. Accept penalties per section IV. Contractor Minimum Requirements, item E (1), for not reporting finalized analytical results within specified turnaround time.
 - Upon request; provide personnel for field collection of samples or County laboratory technical support services. Laboratory technical support services may include supplemental laboratory equipment cleaning, maintenance, and/or sample processing assistance at the County's own laboratory facility at 2245 N. Glassell St., Orange, CA 92865
 - 11. Be available for services on major holidays (Thanksgiving week, Christmas Eve and Christmas Day, New Year's Eve and New Year's Day, Memorial Day, Fourth of July, and Labor Day). These rare occasions include storm events or a major water pollution investigation. Contractor is expected to perform essential analyses or sample preparation that will deem the samples suitable for analysis during normal business hours.
 - 12. Provide "RUSH" services on the reporting of analyses for some time-sensitive

County of Orange OC Public Works MA-080-22010121 Water Quality Analytical Services Page 22 of 58 File No.: 2100802 projects.

- 13. Accept quality control provisions and penalties for failure to perform to stated levels of accuracy and precision as per section IV. Contractor Minimum Requirements, item F (1).
- 14. Accept unannounced inspection of facilities and operations by County's personnel or an authorized QA/QC auditor(s) during term of contract.
- 15. Provide lab reports electronically in Portable Document Format (.pdf), Electronic Data Report (EDR). Must accept penalties for data transcription errors of EDR files at a maximum allowable error rate of 0.1% of the total data values within the respective EDR.
- 16. Must provide lab reports electronically in the Surface Water Ambient Monitoring Program (SWAMP) compatible format upon request.
- 17. Conduct laboratory procedures for the analysis of aqueous, sediment, and tissue samples from freshwater, estuarine, and marine environments for chemical and other analyses as requested. Contractor shall perform all analyses according to published methods presented in, but not limited to, the following documents or their subsequent updates:
 - a. Standard Methods for the Examination of Water and Wastewater (APHA, AWWA, WPCF), latest edition,
 - b.EPA 600/4-79-020 Methods for Chemical Analysis of Water and Wastes, March 1983, including subsequent amendments,
 - c. Federal Register, Guidelines Establishing Test Procedures for the Analysis of Pollutants, Part III, Vol. 44, No. 233, Monday, December 3, 1979, including subsequent amendments,
 - d. Federal Register, Guidelines for Establishing Test Procedures for the Analysis of Pollutants Under the Clean water Act; Final Rule and Interim Final Rule and Proposed Rule. Part VIII, Vol. 49, No. 209, Friday, October 26, 1986, including subsequent amendments,
 - e. EPA-600/4-82-057 Methods for Chemical Analysis of Municipal and Industrial Wastewater, July, 1982 and subsequent revisions.
 - f. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, latest edition,
 - g.Revised method protocols as published under EPA Method Update Rules (MUR).
 - h.Other procedures established as EPA protocol, and published in the Federal Register.
 - i. In the event there is more than one standard method for the same analysis, Contractor shall use the latest certified and/or generally accepted analytical

method in consultation with the County. All analyses shall be conducted by EPA approved methods unless instructed by the County.

- j. Upon request, Contractor may be asked to adopt, develop and implement new or alternative analytical procedures for certain analytes/constituents not already included in this scope of work, or for analytes that do not have published methods. Contractor will work with the County to determine the appropriate laboratory methods, detection limits, and standards for these analyses. For these studies, costs will be billed in accordance with Attachment D, or added to the Contract by the County.
- B. Variation from procedures detailed in the above publications by the Contractor must be approved by County. In general, the procedures detailed in the above publications provide the County with the necessary sensitivity and precision required to meet water quality standards set by regulatory agencies for the NPDES stormwater permits, adopted Total Maximum Daily Load compliance programs, special management directives such as Waste Discharge Requirements while also being able to evaluate environmental data in terms of important toxicity thresholds such as the Lethal Concentrations to 50% of a testing population (LC50). In addition, the County has an extensive water quality trend monitoring program spanning decades that has implemented consistently improving methodologies in order to improve trends detection. Unapproved methods by Contractor may impair testing results and affect the long term regulatory based trend monitoring program. Therefore, methods from the above noted publications are preferred for analyses performed by the Contractor. The County will accept alternate methods submitted by Contractor if the proposed substitution can achieve acceptable performance standards (method detection limits and precision) in complex environmental matrices including highly turbid stormwater runoff.

IV. CONTRACTOR MINIMUM REQUIREMENTS

- A. <u>Contractor must</u>:
 - 1. Cover all fees related to labor, courier services, materials (coolers, sample containers (cubitainers), jars, sample bottles, etc.), special equipment and permits (where applicable) needed to provide analytical services.
 - 2. Provide weekend service and operate at extended hours when necessary for special projects, water pollution spill response events, and stormwater runoff sample pick-up including nights and holiday weekends, when necessary, for preliminary analyses.
 - 3. Be available for services, when necessary, when provided an advanced notice by County personnel, on major holidays (Thanksgiving week, Christmas Eve and Christmas Day, New Year's Eve and New Year's Day, Memorial Day, Fourth of July, and Labor Day). These rare occasions include storm events or a major water pollution investigation. Contractor is expected to perform essential analyses or sample preparation that will deem the samples suitable for analysis during normal business hours.
 - 4. Accept, on a contractual basis, penalties for not reporting finalized analytical results within the applicable time period. The standard turn-around time is on or before the 28th day after receipt of samples from County. The standard penalty for

County of Orange OC Public Works MA-080-22010121 Water Quality Analytical Services Page 24 of 58 File No.: 2100802 late reporting is a 10% discount on the invoice total for every 7-day period that passes. When requested by the County, rushed samples are subject to the turnaround times and penalties described in Attachment B, section II, item E. Contractor must provide a draft report of analytical results within 1 business day for rush samples. The County will grant time extensions beyond the reporting time limit to Contractor only on a pre-approved case by case basis.

- 5. Accept the following analytical quality control provisions and penalties for failure to perform to stated levels of accuracy and precision as listed below:
 - a. Accept quality control provisions
 - b. Accept reporting limit provisions
 - c. Accept penalties for performance failure
 - d. Actual limits and penalties are described in Section F.
- B. <u>Lab Reports</u>:
 - 1. Provide lab reports electronically in Portable Document Format (PDF) referenced by County chain of custody "Workorder" number. PDF files with electronic signatures of the laboratory director will be acceptable. Must also provide results in the electronic data report (EDR) format shown in Attachment E. Submittal of pdf and EDR files shall be subject to reporting timeframes as described in Section IV.A.4., above. EDR files shall also be subject to a maximum allowable error rate of 0.1% of the total data values within the respective EDR. Must accept penalties for failure to meet this performance standard. All reporting costs shall be included in the costs of analyses as quoted. All electronic reporting functions as specified above must be operational on the effective date of the price agreement.
 - 2. Must format invoices (hardcopy and electronic) to include County analysis/billing and project codes. An example of an acceptable hardcopy format is shown in Attachment D. An acceptable electronic format is shown in Attachment F.
 - 3. Must provide lab reports electronically in the Surface Water Ambient Monitoring Program (SWAMP) compatible format and/or in the California Environmental Data Exchange Network (CEDEN) compatible format referenced by County chain of custody "Workorder number" upon request. Submittal of SWAMP and CEDEN electronic files shall be subject to reporting timeframes as described in Section IV.A.4., above. SWAMP and CEDEN electronic files shall also be subject to a maximum allowable error rate of 0.1% of the total data values within the respective report. Must accept penalties for failure to meet this performance standard.
 - 4. As application programming interface (API) applications become available, lab reports and invoices may be requested through API on an as-needed basis.
 - 5. Must provide a report listing additional details of agreed upon analyses when submitting the Contractor bid. A revised version is required when an update to any field of the report is implemented. An acceptable electronic format can be found in Attachment G.
- C. <u>Group Analyses</u>:

County of Orange OC Public Works MA-080-22010121 Water Quality Analytical Services Page 25 of 58 File No.: 2100802 1. Compounds typically analyzed as groups include, but not limited to, the following. Each compound group is analyzed as a whole with specified method, and standard compound mixes are readily available commercially. Pricing shall cover all compounds within the group, not individual compounds. County may request new commercially available compound groups be added to the list: CAM 17 Inorganics (CAM17) and CWA Complete Trace Metals (MET)

Sb	Hg
As	Мо
Ba	Ni
Be	Se
Cd	Ag
Со	T1
Cr	V
Cu	Zn
Pb	

a.) (CAM17 and CAM17-S)

b.) In (MET, MET-SW and MET-S) add

Al	Mn
Fe	Sn
Ca (Water Only)	Ti
Mg (Water Only)	Sr
K (Water Only)	

2. Trace Metals – Freshwater (TRF, TRF-T)

Ag	Ni
Cd	Pb
Cr	Zn
Cu	

3. Trace Metals – Freshwater (TRF As Se Fe)

Ag	Fe
As	Ni
Cd	Pb
Cr	Se
Cu	Zn

4. Trace Metals – Freshwater (TRF As Se Hg)

Ag	Hg
As	Ni
Cd	Pb
Cr	Se
Cu	Zn

5. Trace Metals – Freshwater (TRF Ag Se Fe Hg Tl)

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Ag	Fe
As	Ni
Cd	Pb
Cr	Se
Cu	Zn
Hg	Tl

6. Trace Metals – Freshwater (TRF Ag Se Fe Hg Tl)

Ag	Fe
As	Ni
Cd	Pb
Cr	Se
Cu	Zn
Hg	T1

7. Trace Metals – Sediment (TRS)

Ag	Fe
As	Ni
Be	Pb
Cd	Se
Cr	Sb
Cu	Tl
Hg	Zn

8. Trace Metals- Seawater (TRSW)

Ag	Ni
Cd	Pb
Cr	Zn
Cu	

9. Trace Metals – Seawater complete (TRSWspc)

Ag	Fe
As	Ni
Be	Pb
Cd	Se
Cr	Sb
Cu	Tl
Hg	Zn

10. Trace Metals - Freshwater, Priority Pollutants (TPP)

Ag	Ni
As	Pb
Be	Se
Cd	Sb
Cr	Tl
Cu	Zn
Hg	

11. Rare Earth Elements (REE)

Ce	Lu
Dy	Nd
Er	Pr
Eu	Sc
Но	Sm
Gd	Tb
La	Y

12. Organophosphate Pesticides (OPP and OPP-S)

ganophosphate Pesticides (OPP and OPP-S)
Bolstar (Sulprofos)	Fenthion
Chlorpyrifos	Malathion
Demeton	Merphos
Diazinon	Mevinphos (Phosdrin)
Dichlorvos	Parathion-methyl
Dimethoate	Phorate
Disulfoton	Tetrachlorovinphos (Storophos)
Ethoprop (Ethoprophos)	Tokuthion
Fenchlorophos (Ronnel)	Trichloronate
Fensulfothion	

13. Carbamate Pesticides (CP and CP-S)

Aldicarb (Temik)	3-Hydroxycarbofuran
Aldicarb Sulfone	Methiocarb (Mesurol)
Carbaryl (Sevin)	Methomyl (Lannate)
Carbofuran (Furadan)	Promecarb
Dioxacarb	Propoxur (Baygon)

14. Pyrethroid Pesticides (PP and PP-S)

Allethrin	Deltamethrin
Bifenthrin	L-Cyhalothrin
Cyfluthrin	Permethrin
Cypermethrin	Prallethrin

15. Chlorinated Herbicides (HERB and HERB-S)

2,4- D	МСРА
2,4-DB	MCPP
Dicamba	2,4,5-T
Dichlorprop	Silvex
Dinoseb	

16. Organochlorine Pesticides (OCP, OCP-T, and OCP-S) and Poly Chlorinated Biphenyls (PCB, PCB-T, and PCB-S)

2,4'-DDD	Endosulfan I
2,4'-DDE	Endosulfan II
2,4'-DDT	Endrin
4,4'-DDD	Endrin Aldehyde
4,4'-DDE	Heptachlor

4,4'-DDT	Heptachlor Epoxide
Aldrin	Methoxychlor
alpha BHC	Mirex
beta BHC	Toxaphene
delta BHC	Trans-Nonachlor
gamma BHC	PCB – Aroclors*
alpha Chlordane	PCB – Congeners
gamma Chlordane	
Dieldrin	
Endosulfan Sulfate	

*Compounds must be consistent with EPA Priority Pollutants (see Federal Register).

17. Polynuclear Aromatic Hydrocarbons (PAH and PAH-S)

Acenaphthene	Chrysene
Acenaphthylene	Dibenzo(a,h)anthracene
Anthracene	Fluoranthene
Benzo(a)anthracene	Fluorene
Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene
Benzo(b)fluoranthene	Naphthalene
Benzo(ghi)perylene	Phenanthrene
Benzo(k)fluoranthene	Pyrene

18. Polybrominated Diphenyl Ethers (PBDE and PBDE-S)

(DFPBDE)	PBDE099
(FTBDE)	PBDE100
PBDE017	PBDE138
PBDE028	PBDE153
PBDE047	PBDE154
PBDE049	PBDE183
PBDE066	PBDE190
PCB077	PBDE209
PBDE085	

19. Pesticides, Herbicides, PCBs, and Pyrethroids (PHPP and PHPP-S)

Endrin
Heptachlor
Heptachlor Epoxide
Methoxychlor
Mirex
Parathion
Perthane
Toxaphene
Trans-Nonachlor
Simazine
2,4,5-TP Silvex
2,4-D
PCB – Aroclors (7)*
PCB – Congeners

Endosulfan Sulfate	
Endosulfan I	
Endosulfan II	
Allethrin	Deltamethrin
Bifenthrin	L-Cyhalothrin
Cyfluthrin	Permethrin
Cypermethrin	Prallethrin

*Compounds must be consistent with EPA Priority Pollutants (see Federal Register).

20. Organochlorine Pesticides - EPA 8081A (OCP-EPA 8081A)

DDD(o,p')	Dieldrin
DDE(o,p')	Endosulfan I
DDT(o,p')	Endosulfan II
DDD(p,p')	Endosulfan sulfate
DDE(p,p')	Endrin
DDT(p,p')	Endrin Aldehyde
Aldrin	HCH, gamma-
HCH, alpha-	Heptachlor
HCH, beta-	Heptachlor epoxide
Chlordane	Methoxychlor
PCB 209-L(Surrogate)	Tetrachloro-m-xylene(Surrogate)
HCH, delta-	Toxaphene

21. Analytes included in Quantitative Analyses for Selenium Speciation (Se-spec), *(Se-spec, full)

Selenate, Se ⁶⁺	*Trimethylselenonium ion
Selenite, Se ⁴⁺	*Selenocysteine
Seleno-L-methionine	*Se-methylselenocysteine
Methylseleninic acid	*Selenohomocysteine
Selenium cyanate	*Selenocystamine
	*Selenocystathionine
*Dimethylselenide	*γ-glutamyl-Se-methylselenocysteine

*The full speciation (Se-spec, *full*) includes all 13 parameters.

22. Phenolic Compounds (PHEN) - Method 604

4-Chloro-3-methylphenol	2-Nitrophenol
2-Chlorophenol	4-Nitrophenol
2,4-Dichlorophenol	Pentachlorophenol
2,4-Dimethylphenol	Phenol
2,4-Dinitrophenol	2,4,6-Trichlorophenol
2-Methyl-4,6-dinitrophenol	

23. Compounds Included in Quantitative Analysis for Extractable Semi-Volatile Organic Compounds (SVOC and SVOC-S)

Base/Neutral Extractable	
Acenaphthene	2,4-dimethylphenol
Acenaphthylene	Dimethyl phthalate
Anthracene	2,4-dinitrotoluene

Benzidine2,6-dinitrotolueneBenzo(a)anthraceneDi-n-octyl phthalateBenzo(b)fluorantheneDiphenylamine (Appendix C)*Benzo(a)pyrene1,2-diphenylhydrazineBenzo(a)pyreneFluorantheneBiphenyl (Appendix C)*FluoreneBis(2-chloroethyl) etherHexachlorobenzeneBis(2-chloroethyl) etherHexachlorobutadieneBis(2-chloroethyl) etherHexachlorobutadieneBis(2-chloroisopropyl) etherHexachlorocyclopentadieneBis(2-ethylhexyl) phthalateHexachlorocyclopentadieneHuyl benzyl phthalateIsophoronen-C10 (Appendix C)*Naphthalenen-C12 (Appendix C)*N-nitrosodimethylaminen-C14 (Appendix C)*N-nitrosodimethylaminen-C20 (Appendix C)*N-nitrosodinethylaminen-C22 (Appendix C)*Phenoln-C24 (Appendix C)*Phenoln-C26 (Appendix C)*Phenoln-C26 (Appendix C)*Phenoln-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*carbazole (4c)a-terpineol (Appendix C)*
Benzo(b)fluorantheneDiphenylamine (Appendix C)*Benzo(k)fluorantheneDiphenyl ether (Appendix C)*Benzo(a)pyrene1,2-diphenylhydrazineBenzo(ghi)peryleneFluorantheneBiphenyl (Appendix C)*FluoreneBis(2-chloroethyl) etherHexachlorobenzeneBis(2-chloroethyxy)methaneHexachlorobutadieneBis(2-chloroisopropyl) etherHexachlorocyclopentadieneBis(2-chloroisopropyl) etherIndeno(1,2,3-cd)pyreneButyl benzyl phthalateIsophoronen-C10 (Appendix C)*Naphthalenen-C12 (Appendix C)*Naphthalenen-C14 (Appendix C)*N-nitrosodimethylaminen-C20 (Appendix C)*N-nitrosodiphenylaminen-C21 (Appendix C)*N-nitrosodiphenylaminen-C22 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C24 (Appendix C)*Phenoln-C28 (Appendix C)*Phenoln-C28 (Appendix C)*Phenoln-C28 (Appendix C)*Styrene (Appendix C)*n-C30 (Appendix C)*Styrene (Appendix C)*
Benzo(k)fluorantheneDiphenyl ether (Appendix C)*Benzo(a)pyrene1,2-diphenylhydrazineBenzo(ghi)peryleneFluorantheneBiphenyl (Appendix C)*FluoreneBis(2-chloroethyl) etherHexachlorobenzeneBis(2-chloroethyoxy)methaneHexachlorobutadieneBis(2-chloroisopropyl) etherHexachlorocyclopentadieneBis(2-chloroisopropyl) etherHexachlorocyclopentadieneBis(2-ethylhexyl) phthalateHexachlorocyclopentadiene4-bromophenyl phenyl etherIndeno(1,2,3-cd)pyreneButyl benzyl phthalateIsophoronen-C10 (Appendix C)*Naphthalenen-C12 (Appendix C)*Naphthalenen-C14 (Appendix C)*N-nitrosodimethylaminen-C16 (Appendix C)*N-nitrosodiphenylaminen-C20 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*Phenoln-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
Benzo(a)pyrene1,2-diphenylhydrazineBenzo(ghi)peryleneFluorantheneBiphenyl (Appendix C)*FluoreneBis(2-chloroethyl) etherHexachlorobenzeneBis(2-chloroethyoxy)methaneHexachlorobutadieneBis(2-chloroisopropyl) etherHexachlorocyclopentadieneBis(2-chloroisopropyl) etherHexachlorocyclopentadieneBis(2-ethylhexyl) phthalateHexachlorocyclopentadiene4-bromophenyl phenyl etherIndeno(1,2,3-cd)pyreneButyl benzyl phthalateIsophoronen-C10 (Appendix C)*Naphthalenen-C12 (Appendix C)*Nitrobenzenen-C16 (Appendix C)*N-nitrosodimethylaminen-C20 (Appendix C)*N-nitrosodiphenylaminen-C22 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*Phenoln-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*Styrene (Appendix C)*
Benzo(ghi)peryleneFluorantheneBiphenyl (Appendix C)*FluoreneBis(2-chloroethyl) etherHexachlorobenzeneBis(2-chloroethyoxy)methaneHexachlorobutadieneBis(2-chloroisopropyl) etherHexachlorocyclopentadieneBis(2-ethylhexyl) phthalateHexachlorocyclopentadiene4-bromophenyl phenyl etherIndeno(1,2,3-cd)pyreneButyl benzyl phthalateIsophoronen-C10 (Appendix C)*Naphthalenen-C14 (Appendix C)*Nitrobenzenen-C16 (Appendix C)*N-nitrosodimethylaminen-C20 (Appendix C)*N-nitrosodiphenylaminen-C22 (Appendix C)*Phenoln-C24 (Appendix C)*Phenoln-C26 (Appendix C)*Phenoln-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
Benzo(ghi)peryleneFluorantheneBiphenyl (Appendix C)*FluoreneBis(2-chloroethyl) etherHexachlorobenzeneBis(2-chloroethyoxy)methaneHexachlorobutadieneBis(2-chloroisopropyl) etherHexachlorocyclopentadieneBis(2-chloroisopropyl) etherHexachlorocyclopentadieneBis(2-ethylhexyl) phthalateHexachlorocyclopentadiene4-bromophenyl phenyl etherIndeno(1,2,3-cd)pyreneButyl benzyl phthalateIsophoronen-C10 (Appendix C)*Naphthalenen-C12 (Appendix C)*B-naphthylaminen-C14 (Appendix C)*N-nitrosodimethylaminen-C18 (Appendix C)*N-nitrosodi-n-propylaminen-C20 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*Phenoln-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
Bis(2-chloroethyl) etherHexachlorobenzeneBis(2-chloroethyoxy)methaneHexachlorobutadieneBis(2-chloroisopropyl) etherHexachloroethaneBis(2-ethylhexyl) phthalateHexachlorocyclopentadiene4-bromophenyl phenyl etherIndeno(1,2,3-cd)pyreneButyl benzyl phthalateIsophoronen-C10 (Appendix C)*Naphthalenen-C12 (Appendix C)*B-naphthylaminen-C14 (Appendix C)*N-nitrosodimethylaminen-C18 (Appendix C)*N-nitrosodi-n-propylaminen-C20 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*Phenoln-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
Bis(2-chloroethyoxy)methaneHexachlorobutadieneBis(2-chloroisopropyl) etherHexachloroethaneBis(2-chloroisopropyl) etherHexachlorocyclopentadiene4-bromophenyl phenyl etherIndeno(1,2,3-cd)pyreneButyl benzyl phthalateIsophoronen-C10 (Appendix C)*Naphthalenen-C12 (Appendix C)*B-naphthylaminen-C14 (Appendix C)*Nitrobenzenen-C16 (Appendix C)*N-nitrosodimethylaminen-C20 (Appendix C)*N-nitrosodiphenylaminen-C22 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*Phenoln-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*Styrene (Appendix C)*
Bis(2-chloroisopropyl) etherHexachloroethaneBis(2-ethylhexyl) phthalateHexachlorocyclopentadiene4-bromophenyl phenyl etherIndeno(1,2,3-cd)pyreneButyl benzyl phthalateIsophoronen-C10 (Appendix C)*Naphthalenen-C12 (Appendix C)*B-naphthylaminen-C14 (Appendix C)*Nitrobenzenen-C16 (Appendix C)*N-nitrosodimethylaminen-C18 (Appendix C)*N-nitrosodi-n-propylaminen-C20 (Appendix C)*Phenanthrenen-C22 (Appendix C)*Phenoln-C24 (Appendix C)*Phenoln-C26 (Appendix C)*Phenoln-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
Bis(2-chloroisopropyl) etherHexachloroethaneBis(2-ethylhexyl) phthalateHexachlorocyclopentadiene4-bromophenyl phenyl etherIndeno(1,2,3-cd)pyreneButyl benzyl phthalateIsophoronen-C10 (Appendix C)*Naphthalenen-C12 (Appendix C)*B-naphthylaminen-C14 (Appendix C)*Nitrobenzenen-C16 (Appendix C)*N-nitrosodimethylaminen-C18 (Appendix C)*N-nitrosodi-n-propylaminen-C20 (Appendix C)*Phenanthrenen-C22 (Appendix C)*Phenoln-C24 (Appendix C)*Phenoln-C26 (Appendix C)*Phenoln-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
Bis(2-ethylhexyl) phthalateHexachlorocyclopentadiene4-bromophenyl phenyl etherIndeno(1,2,3-cd)pyreneButyl benzyl phthalateIsophoronen-C10 (Appendix C)*Naphthalenen-C12 (Appendix C)*B-naphthylaminen-C14 (Appendix C)*Nitrobenzenen-C16 (Appendix C)*N-nitrosodimethylaminen-C18 (Appendix C)*N-nitrosodi-n-propylaminen-C20 (Appendix C)*Phenanthrenen-C22 (Appendix C)*Phenoln-C24 (Appendix C)*Phenoln-C26 (Appendix C)*Phenoln-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
4-bromophenyl phenyl etherIndeno(1,2,3-cd)pyreneButyl benzyl phthalateIsophoronen-C10 (Appendix C)*Naphthalenen-C12 (Appendix C)*B-naphthylaminen-C14 (Appendix C)*Nitrobenzenen-C16 (Appendix C)*N-nitrosodimethylaminen-C18 (Appendix C)*N-nitrosodi-n-propylaminen-C20 (Appendix C)*N-nitrosodiphenylaminen-C22 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*Phenoln-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
Butyl benzyl phthalateIsophoronen-C10 (Appendix C)*Naphthalenen-C12 (Appendix C)*B-naphthylaminen-C14 (Appendix C)*Nitrobenzenen-C16 (Appendix C)*N-nitrosodimethylaminen-C18 (Appendix C)*N-nitrosodi-n-propylaminen-C20 (Appendix C)*N-nitrosodiphenylaminen-C22 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*Phenoln-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
n-C12 (Appendix C)*B-naphthylaminen-C14 (Appendix C)*Nitrobenzenen-C16 (Appendix C)*N-nitrosodimethylaminen-C18 (Appendix C)*N-nitrosodi-n-propylaminen-C20 (Appendix C)*N-nitrosodiphenylaminen-C22 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*a-Picoline (Synfuel)n-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
n-C12 (Appendix C)*B-naphthylaminen-C14 (Appendix C)*Nitrobenzenen-C16 (Appendix C)*N-nitrosodimethylaminen-C18 (Appendix C)*N-nitrosodi-n-propylaminen-C20 (Appendix C)*N-nitrosodiphenylaminen-C22 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*a-Picoline (Synfuel)n-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
n-C14 (Appendix C)*Nitrobenzenen-C16 (Appendix C)*N-nitrosodimethylaminen-C18 (Appendix C)*N-nitrosodi-n-propylaminen-C20 (Appendix C)*N-nitrosodiphenylaminen-C22 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*a-Picoline (Synfuel)n-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
n-C16 (Appendix C)*N-nitrosodimethylaminen-C18 (Appendix C)*N-nitrosodi-n-propylaminen-C20 (Appendix C)*N-nitrosodiphenylaminen-C22 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*a-Picoline (Synfuel)n-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
n-C18 (Appendix C)*N-nitrosodi-n-propylaminen-C20 (Appendix C)*N-nitrosodiphenylaminen-C22 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*a-Picoline (Synfuel)n-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
n-C20 (Appendix C)*N-nitrosodiphenylaminen-C22 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*a-Picoline (Synfuel)n-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
n-C22 (Appendix C)*Phenanthrenen-C24 (Appendix C)*Phenoln-C26 (Appendix C)*a-Picoline (Synfuel)n-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
n-C24 (Appendix C)*Phenoln-C26 (Appendix C)*a-Picoline (Synfuel)n-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
n-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
n-C28 (Appendix C)*Pyrenen-C30 (Appendix C)*styrene (Appendix C)*
n-C30 (Appendix C)* styrene (Appendix C)*
2-chloronaphthalene 1,2,3-trichlorobenzene (4c)
4-chlorophenyl phenyl ether 1,2,4-trichlorobenzene
Chrysene Acid Extractable Compounds
P-cymene (Appendix C)* 4-chloro-3-methylphenol
Dibenzo(a,h)anthracene 2-chlorophenol
Dibenzofuran (Appendix C and 4c)* 2,4-dichlorophenol
Dibenzothiophene (Synfuel) 2,4-dinitrophenol
Di-n-butyl phthalate 2-methyl-4,6-dinitrophenol
1,2-dichlorobenzene 2-nitrophenol
1,3-dichlorobenzene 4-nitrophenol
1,4-dichlorobenzene Pentachlorophenol
3,3-dichlorobenzidine 2,3,6-trichlorophenol (4c)
Diethyl phthalate 2,4,5-trichlorophenol (4c)

*Referenced Appendices in 40CFR Part 136

24. Volatile Organic Compounds (VOCs)

Acetone	Trans-1,2-dichloroethane
Acrolein	1,2-dichloropropane
Acrylonitrile	Cis-1,3-dichloropropene
Benzene	Trans-1,3-dichloropropene
Bromodichloromethane	Diethyl ether
Bromoform	P-dioxane
Bromomethane	Ethylbenzene

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Carbon tetrachloride	Methylene chloride
Chlorobenzene	Methyl ethyl ketone
Chloroethane	1,1,2,2-tetrachloroethane
2-chloroethylvinyl ether	Tetrachloroethene
Chloroform	Toluene
Chloromethane	1,1,1-trichloroethane
Dibromochloromethane	1,1,2-trichloroethane
1,1-dichloroethane	Trichloroethene
1,2-dichloroethane	Vinyl chloride
1,1-dichloroethene	

25. Fipronil Insecticides (FIP and FIP-S)

Parent Compound		
Fipronil	CAS# 120068-37-3	
Breakdown Products		
Fipronil Amide		
Fipronil Sulfide		
Fipronil Sulfone	CAS# 120068-36-2	
Desulfinyl Fipronil		
Desulfinyl Fipronil Amide		

26. Quantitative Analysis for Sediment Quality Objectives (SQO-S)

1-methylnaphthalene	y Chlordane
· · ·	
1-methylphenanthrene	Chrysene
1,6,7-trimethylnaphthalene	Dibenz[a,h]anthracene
2,4'-DDD	Dieldrin
2,4'-DDE	Heptachlor
2,4'-DDT	Heptachlor Epoxide
2,6-Dimethylnaphthalene	Fluoranthene
2-methylnaphthalene	Fluorene
4,4'-DDD	Indeno(1,2,3-c,d)pyrene
4,4'-DDE	Methoxychlor
4,4'-DDT	Naphthalene
Acenaphthene	cis-Nonachlor
Acenaphthylene	trans-Nonachlor
Anthracene	Oxychlordane
Benzo[a]anthracene	PCB – Aroclors*
Benzo[a]pyrene	PCB - Congeners
Benzo[b]fluoranthene	Perylene
Benzo[e]pyrene	Phenanthrene
Benzo[k]fluoranthene	Pyrene
Biphenyl	Toxaphene
α Chlordane	

* Compounds must be consistent with EPA Priority Pollutants (see Federal Register).

27. Quantitative Analysis for Neonicitinoid Pesticides (NEONIC and NEONIC-S)

	Acetamip	orid	Nithiazine
-			

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Clothianidin	Thiamethoxam
Imidacloprid	Dinotefuran

28. Quantitative Analysis for Nutrients (NUT)

EC	PO4
Turbidity	Ortho P
NO2+NO3	TSS
NH3	VSS
TKN	pH

29. Quantitative Analysis for Pharmaceuticals and Personal Care Products (PPCPs)

Amoxicillin	Fluoxetine	
Atenolol	Meprobamate	
Atorvastatin	Methadone	
Azithromycin	Phenytoin	
Carbamazepine	Primidone	
Caffeine	Sulfamethoxaz	
Ciprofloxacin	TCEP	
Cotinine	ТСР	
DEET	TDCPP	
Diazepam	Trimethoprim	

30. Indicator Bacteria (BactiMF)

Total Coliform	Enterococcus
Fecal Coliform	

31. General Minerals (GM)

рН	TDS
EC	HCO3
Turbidity	Cl
Са	SO4
Mg	F
Na	NO3
Κ	SiO2
CO3	В
Hardness as CaCO3	CO2 (by difference)

32. Polyfluoroalkyl Substances (PFAS)

11Cl-PF3OUdS	PFBS
4:2 FTS	PFDA
6:2 FTS	PFDoA
8:2 FTS	PFDS
9C1-PF3ONS	PFHpA
ADONA	PFHpS
EtFOSA	PFHxA
EtFOSAA	PFHxS
EtFOSE	PFNA

Attachment C

FOSA	PFNS
HFPO-DA	PFOS
MeFOSA	PFPeA
MeFOSAA	PFPeS
MeFOSE	PFTeDA
Perfluorooctanoic acid (PFOA)	PFTrDA
PFBA	PFUnA

33. BTEX and BTEX-S

Benzene	Toluene
EthylBenzene	Total Xylene

34. Radioactivity (RAD)

Gross Alpha and Beta	Radon222
Radium226	

35. Rainwater (RAIN)

pH	Cl
EC	Cu
NO2+NO3	Cd
NH3	Cr
TKN	Fe
SO4	Ni
PO4	Pb
TDS	Zn
Na	

D. <u>Reporting Limits</u>:

Provided below is a list of maximum acceptable reporting limits and units for various constituents in aqueous, sediment, and tissue matrices. Contractor may not deviate from maximum acceptable reporting limits without explicit approval of County. Contractor must provide laboratory and electronic data report (EDR) results in the units specified in the following table. Contractor must provide reasonable explanation for alternate proposed reporting limits.

Aqueous Samples	Reporting Limit and Units
Na, Mg, K, Ca	1.0 mg/L
SO ₄ , Cl, HCO ₃ , CO ₃	1.0 mg/L
SO ₄ in Rainwater	0.5 mg/L
F	0.1 mg/L
В	0.1 mg/L
Nitrite + Nitrate as NO ₃	0.4 mg/L
NH ₃ as N	0.1 mg/L
TKN	0.2 mg/L
Total Phosphorus as PO ₄	0.06 mg/L
Orthophosphate as P	0.02 mg/L
SiO ₂	0.5 mg/L

Aqueous Samples	Reporting Limit and Units
Total Non-filterable Residue (Total Suspended Solids (TSS))	5.0 mg/L
Volatile Non-filterable Residue (Volatile Suspended Solids (VSS))	5.0 mg/L
Total Filterable Residue (Total Dissolved Solids (TDS))	5.0 mg/L
Ag, Cd, Cr, Cu, Ni, Pb, Sb in freshwater	0.5 ug/L
As, Se, in freshwater	0.4 ug/L
Tl,in freshwater	0.2 ug/L
Hg in freshwater	0.01 ug/L
Zn in freshwater	2 ug/L
Fe, Mn in freshwater	5 ug/L
Ag, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Sb, Tl, Zn, in seawater	0.05 ug/L
Hg in seawater	0.5 ng/L
Oil & Grease	5 mg/L
MBAS	0.1 mg/L
Organochlorine Pesticides (except Toxaphene)	2 ng/L
Toxaphene	20 ng/L
PCB Congeners	20 ng/L
PCB Arochlors	20 ng/L
Organophosphorus Pesticides	5 ng/L
Carbaryl in freshwater	2 ug/L
Pyrethroid Pesticides in freshwater	2 ug/L 2 ng/L
Fipronil Insecticides	5 ng/L
Neonicotinoid Pesticides	4 - 4 ng/L
Triclopyr	1.0 ug/L
Glyphosate	5.0 ug/L
Nonylphenol	100 ng/L
Total Petroleum Hydrocarbons (TPH)	0.1 mg/L
Volatile Organic Compounds (VOC)	5 ng/L
Semi-Volatile Organic Compounds (SVOC)	5 ng/L
Sediment and Tissue Samples (dry wt)	
Organochlorine Pesticides (except Toxaphene)	2 ug/kg
Toxaphene	20 ug/kg
Total Petroleum Hydrocarbons (TPHS)	5 mg/kg
Volatile Organic Compounds (VOC)	2-100 ng/g
Semi-Volatile Organic Compounds (SVOC)	2-100 ng/g
Fipronil Insecticides	5 ng/g
PCB Congeners	2 ug/kg
PCBs (Aroclors)	20 ug/kg
Pyrethroid Pesticides	5 ug/kg
Fipronil Insecticides	5 ug/kg
PAHs	2 ug/kg
Cadmium	0.05 mg/kg
Copper	0.05 mg/kg
Chromium (total)	0.05 mg/kg
Lead	0.05 mg/kg
Mercury	0.05 mg/kg
Nickel	0.05 mg/kg
Selenium	0.05 mg/kg
Silver	0.05 mg/kg
Zinc	0.05 mg/kg

E. <u>Limits of Error and Penalties Related Thereto</u>:

Limits of error for the common dissolved constituents in aqueous samples are defined in the following schedule, which shall apply to the determination of satisfactory accuracy or precision in analyses for these components:

Constituent	Allowable Error
Calcium	5% or 1.5 mg/1 , whichever is greater
Magnesium	6% or 1.5 mg/1, whichever is greater
Sodium	5% or 2.0 mg/1, whichever is greater
Potassium	5% or 1.0 mg/1 , whichever is greater
Chloride	5% or 1.0 mg/1 , whichever is greater
Sulfate	5% or 1.0 mg/1 , whichever is greater
Fluoride	10% or 0.1 mg/1, whichever is greater
Boron	5% or 0.2 mg/1 , whichever is greater
Silica	10% or 2.0 mg/1, whichever is greater
Nitrate + Nitrite as NO ₃	10% or 1.0 mg/l whichever is greater
Total Phosphorus as PO ₄	20% or 0.20 mg/l whichever is greater
Orthophosphate as P	20% or 0.20 mg/l whichever is greater
Ammonia Nitrogen	20% or 0.20 mg/l whichever is greater
Total Kjeldahl Nitrogen	20% or 0.20 mg/l whichever is greater
Ag, As, Be, Cd, Cr, Cu, Fe, Hg,	$\pm 25\%$ for concentrations greater than or
Mn, Ni, Pb, Se, Sb, Tl, Zn	equal to 5X RDL (See Section 5)
MBAS	25% for concentrations greater than or equal
WIDAS	to 0.5 mg/l
Organophosphorus Pesticides	Concentrations cannot be beyond certified
	QC performance limits as provided by the
	reference material vendor
Semi-volatile Organic Carbon and	Concentrations cannot be beyond certified
Polycyclic Aromatic Hydrocarbons	QC performance limits as provided by the
	reference material vendor
Oil & Grease	Concentrations cannot be beyond certified
	QC performance limits as provided by the
	reference material vendor
Ion Balance (Gen. Mineral)	0.5 milli-equivalents per liter or 5%
	whichever is greater

1. In the case of analytical parameters not listed above, determinations of satisfactory accuracy and/or precision may be made by County, on notification of Contractor, from information in the latest edition of "Standard Methods," or from other reputable publications. For samples prepared from Quality Control (QC) or Proficiency Testing (PT) standards, performance thresholds based on the allowable performance acceptance limits certified by the vendor will be used as the criteria for acceptability of results.

In the case of deviation from true values for known composition samples submitted by County for <u>accuracy</u> quality control, County may, at its option, either notify Contractor, if County believes the error is of a random nature or submit to Contractor another known sample. If the error in analyses exceeds the allowable error limits as described in the preceding table, County may require Contractor to reanalyze, for the constituent in question, or all samples within the same batch as

Page 36 of 58 File No.: 2100802 the QA/QC check sample. These follow-up analyses must be conducted by Contractor at the sole expense of Contractor. Refusal by Contractor to re-analyze for constituent(s) in question as requested by County will result in an automatic 10% discount to the entire Contractor invoice for that sample batch.

On the second occurrence of Contractor failing to meet accuracy quality control, within 60 days (based on sample submittal date), of excessive error in analysis for the same constituent, Contractor's invoice(s), for all individual analyses for that constituent and group analyses containing those individual analyses conducted on samples submitted during the calendar month of the initial error, shall be discounted in accordance with the following table:

Limits of Ratios of Errors to Allowable Errors	% Discount
1.0 - 1.1	10
1.1 - 1.2	20
1.2 - 1.3	30
1.3 - 1.4	40
Over 1.4	50

In the case of reporting limits deviating from specified Maximum Acceptable Reporting Limits, County will notify Contractor of reporting error. County may require Contractor to reanalyze, for the constituent in question, or all samples within the same batch. Follow-up analyses must be conducted by Contractor or may be subcontracted to an ELAP certified laboratory capable of meeting the Maximum Acceptable Reporting Limits at the sole expense of Contractor. Refusal by Contractor to re-analyze for constituent(s) in guestion as requested by County will result in an automatic 10% discount to the entire Contractor invoice for that sample batch. County understands the technical issues associated with the Maximum Acceptable Reporting Limits in specific categories of analyses, especially in difficult environmental matrices, and will work with Contractor to ensure positive progress is made in a timely manner to resolve reporting limits problems. Contractor must notify County prior to performing analyses if Maximum Acceptable Reporting Limits cannot be achieved. Any exceptions to Maximum Acceptable Reporting Limits need to be listed as Exceptions to Attachments and include all of the following: proposed EPA Method number, method detection limits, holding time, minimum sample volume needed for analysis, and preservation requirement.

PDF and EDR reports shall be reported to the County no later than 4 weeks after samples are submitted to the lab. Failure to submit within this time shall result in a 10% penalty per week from amount due on 30 day invoice.

Submittal of pdf and EDR files shall be subject to reporting timeframes as described above. EDR files shall also be subject to a maximum allowable error rate of 0.1% of the total data values within the respective EDR.

- F. <u>Additional Work</u>:
 - 1. Upon County request, the Contractor shall submit supplemental proposals for Additional Work reasonably related to the categories listed under Section II. A.

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Page 37 of 58 File No.: 2100802 Contractor must obtain County Project Manager written approval prior to commencing any Additional Work. Additional Work services may include but not limited to:

- a) Development and implementation of analytical procedures for new and emerging analytes/constituents not already included in this scope of work.
- b) Special studies of new, alternative, or experimental laboratory analytical methods for analytes/constituents identified by the County.
- 2. Upon completion of any Additional Work, the County's Project Manager or designee and Contractor will inspect the finished product at no additional cost to the County. Upon mutual acceptance of the Additional Work, the Contractor shall again be responsible for all services originally covered under this Contract and the work performed under this section.
- G. <u>Facility Inspections:</u> County may request an inspection of Contractor's facility from time to time during this Contract. Inspections shall be coordinated between County and Contractor.

ATTACHMENT B PAYMENT/COMPENSATION

1. **Compensation:** This is a usage Contract between the County and Contractor for Water Quality Analytical Services as set forth in Attachment A, "Scope of Work".

The Contractor agrees to accept the specified compensation as set forth in this Contract as full payment for performing all services and furnishing all staffing and materials required, for any reasonably unforeseen difficulties which may arise or be encountered in the execution of the services until acceptance, for risks connected with the services, and for performance by the Contractor of all its duties and obligations hereunder. The Contractor shall only be compensated as set forth herein for work performed in accordance with the Scope of Work. The County shall have no obligation to pay any sum in excess of the Fixed Prices and Total Contract Amount specified herein unless authorized by amendment in accordance with Articles C and P of the County Contract Terms and Conditions, which may require approval by the County Board of Supervisors.

2. **Fees and Charges:** Payment shall be made in accordance with the provisions of this Contract. Partial payments may be allowed at the discretion of the County Project Manager. Payment shall be as follows:

	Group Name	Analysis & Billing Code	Analyses Performed	Unit Price
1	BTEX	BTEX		\$89.00
2	BTEX-Sediment	BTEX-S		\$89.00
3	CAM 17 Inorganic	CAM17		\$99.00
4	CAM 17 Inorganics – Sediment	CAM17-S		\$116.00
5	Carbamate Pesticides	СР		\$166.00
6	Carbamate Pesticides - Sediment	CP-S		\$166.00
7	Chlorinated Herbicides	HERB		\$224.00
8	Chlorinated Herbicides - Sediment	HERB-S		\$224.00
9	Complete CWA Trace Metals - Salt Water	MET-SW		\$239.00
10	Complete CWA Trace Metals - Sediment	MET-S		\$159.00
11	Complete CWA Trace Metals	MET		\$131.00
12	Complete Pesticides	CPest		\$611.00
13	Fipronil Insecticide and Degradants	FIP		\$191.00
14	Fipronil Insecticide and Degradants – Sediment	FIPS		\$191.00
15	General Mineral	GM	pH, EC, Turbidity, Ca, Mg, Na, K, CO3, TDS, HCO3, Cl, SO4, F, NO3, SiO2, B, Hardness as	\$139.00

A. <u>Group Analyses</u>

	Group Name	Analysis & Billing Code	Analyses Performed	Unit Price
			CaCO3, CO2 (by difference)	
16	Indicator Bacteria	BactiMF	Total Coliform, Fecal Coliform, Enterococcus	No Bid
17	Neonicitinoid Pesticides	NEONIC		\$191.00
18	Neonicitinoid Pesticides – Sediment	NEONIC-S		\$191.00
19	Nutrient	NUT	pH, EC, Turbidity, NO2+NO3, NH3, TKN, PO4, Ortho P, TSS, VSS	\$114.00
20	Organics, Total Toxic	ТТО		\$466.00
21	Organics, Total Toxic (Purgeable)	ТРО		No Bid
22	Organics, Volatile	VOC	See Federal Register	\$114.00
23	Organics, Volatile – Sediment	VOC-S		\$114.00
24	Organochlorine Pesticides	OCP - EPA 8081A		\$No Bid
25	Organochlorine Pesticides	OCP		\$191.00
26	Organochlorine Pesticides and PCBs in Tissue	OCP-T	40 CFR, Part 423Section II.C	\$214.00
27	Organochlorine Pesticides Sediment	OCP-S		\$191.00
28	Organophosphate Pesticides	OPP		\$191.00
29	Organophosphate Pesticides - Sediment	OPP-S		\$191.00
30	PCB's - Sediment	PCB-S	Aroclors, Congeners See Federal Register	\$191.00
31	PCB's - Tissue	PCB-T		\$214.00
32	Pest., Herb., PCBs, Pyreth – Sediment	PHP-PP-S		\$631.00
33	Pharmecutical and Personal Care Products	РРСР		\$No Bid
34	Phenolic Compounds	PHEN		\$114.00
35	Polybrominated Diphenyl Ethers	PBDE		\$201.00
36	Polybrominated Diphenyl Ethers - Sediment	PBDE-S		\$201.00
37	Polychlorinated Biphenyls (PCBs)	РСВ	Aroclors, Congeners, See Federal Register	\$191.00
38	Polychlorinated Dibenzo-P- Dioxins	PDD	See Federal Register	\$794.00
39	Polyfluorakyl Substances	PFAS		\$191.00
40	Polynuclear Aromatic Hydrocarbons	РАН		\$191.00

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	Group Name	Analysis & Billing Code	Analyses Performed	Unit Price
41	Polynuclear Aromatic Hydrocarbons - Sediment	PAH-S		\$191.00
42	Pyrethroid Pesticides	РР		\$191.00
43	Pyrethroid Pesticides – Sediment	PP-S		\$191.00
44	Radioactivity	RAD		\$249.00
45	Rainwater	RAIN	pH, EC, NO2+NO3, NH3, TKN, SO4, PO4, TDS, Na, Cl , Cu, Cd, Cr, Fe, Ni, Pb, Zn	\$136.00
46	Rare Earth Elements	REE		\$149.00
47	Sediment Quality Objectives – Sediment	SQO-S		\$464.00
48	Selenium in Tissue	Se-T		\$109.00
49	Selenium Speciation	Se-spec		No Bid
50	Selenium Speciation, full analysis	Se-spec, full		No Bid
51	SemiVolatile Organic Compounds	SVOC		\$464.00
52	SemiVolatile Organic Compounds - Sediment	SVOC-S		\$581.00
53	Soluble Threshold Limit Concentration (STLC)	STLC	California Administrative Code Title 22, Article 11(CAM)	\$179.00
54	Total Nitrogen and Phosphorus in Plant Material	NPP		\$99.00
55	Total Nitrogen and Phosphorus in Sediment	NPS		\$89.00
56	Total Petroleum Hydrocarbons – Carbon Chain	TPH-CC	Modified 8015B	\$79.00
57	Total Petroleum Hydrocarbons – Carbon Chain in Sediment	TPHS-CC	Modified 8015B	\$79.00
58	Total Petroleum Hydrocarbons Diesel, Gasoline and Oil Range	ТРН	Modified 8015	\$69.00
59	Total Petroleum Hydrocarbons – Sediment (EPA 8015M)	TPH-S	Modified 8015	\$69.00
60	Total Recoverable Petroleum Hydrocarbons	TRPH	SGT-HEM	\$69.00
61	Total Recoverable Petroleum Hydrocarbons – Sediment	TRPH-S	IR Spectrophotometric Method	\$69.00
62	Total Threshold Limit	TTLC	California Administrative Code Title 22, Article 11(CAM)	\$179.00
63	TPH as Diesel and Oil (Oil and Diesel Range Organics)	TPH as Diesel and Oil		\$69.00
64	Trace Metals – Freshwater	TRF	Ag, Cd, Cr, Cu, Ni, Pb, Zn	\$79.00
65	Trace Metals – Freshwater	TRF Ag Se Fe Hg Tl		\$104.00

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Attachment C

	Group Name	Analysis & Billing Code	Analyses Performed	Unit Price
66	Trace Metals – Freshwater	TRF As Se		\$64.00
67	Trace Metals – Freshwater	TRF As Se Fe	Ag, As, Cd, Cr, Cu, Fe, Ni, Pb, Se, Zn	\$99.00
68	Trace Metals – Freshwater	TRF As Se Hg		\$99.00
69	Trace Metals - Freshwater, Priority Pollutants	ТРР		\$99.00
70	Trace Metals – Seawater complete	TRSWspc		\$239.00
71	Trace Metals – Tissue	TRF-T		\$174.00
72	Trace Metals - Sediment	TRS	Ag, As, Be, Cd, Cr, Cu, Hg, Fe, Ni, Pb, Se, Sb, Tl, Zn	\$159.00
73	Trace Metals - Seawater	TRSW	Ag, Cd, Cr, Cu, Ni, Pb, Zn	\$159.00
74	TTLC Sediment	TTLCS	California Administrative Code Title 22, Article 11(CAM)	\$179.00

B. Individual Analyses

	Individual Determination	Analysis & Billing Code	Unit Price
1	1,4- Dioxane	DIOX	\$134.00
2	Acetaminophen	ACET	No Bid
3	Acid Volatile Sulfides - Sediment	AVS	\$54.00
4	Alkalinity	ALKA	\$11.00
5	Aluminum- Seawater	Al-SW	\$94.00
6	Aluminum-Sediment	Al-S	\$34.00
7	Aluminum, ICP	AL-ICP	No Bid
8	Aluminum, ICP-MS	Al	\$24.00
9	Ammonia as N - Sediment	NH3-S	\$34.00
10	Antimony – Sediment	Sb-S	\$34.00
11	Antimony- Seawater	Sb-SW	\$94.00
12	Antimony, ICP-MS	Sb	\$24.00
13	Arsenic - Seawater	As-SW	\$94.00
14	Arsenic – Sediment	As-S	\$34.00
15	Arsenic, ICP-MS	As	\$24.00
16	Avian GFD Gene Marker	AvianGFD	\$279.00
17	Biological Oxygen Demand, Total	BOD	\$44.00
18	Barium - Seawater	Ba-SW	\$94.00
19	Barium – Sediment	Ba-S	\$34.00
20	Barium, ICP	Ba-ICP	No Bid
21	Barium, ICP-MS	Ba	\$24.00

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	Individual Determination	Analysis & Billing Code	Unit Price
22	Beryllium - Seawater	Be-SW	\$94.00
23	Beryllium – Sediment	Be-S	\$34.00
24	Beryllium, ICP-MS	Be	\$24.00
25	Bismuth - Seawater	Bi-SW	\$94.00
26	Bismuth – Sediment	Bi-S	\$34.00
27	Bismuth, ICP-MS	Bi	\$24.00
28	Boron - Seawater	B-SW	\$94.00
29	Boron – Sediment	BO-S	\$34.00
30	Boron, ICP-MS	В	\$24.00
31	Boron, Circumin Method	BCM	No Bid
32	Bromide	Br	No Bid
33	Chemical Oxygen Demand	COD	\$44.00
34	Cadmium - Seawater	Cd-SW	\$94.00
35	Cadmium - Sediment	Cd-S	\$34.00
36	Cadmium, ICP-MS	Cd	\$24.00
37	Calcium – ICP	Ca-ICP	No Bid
38	Calcium, EDTA	Са	No Bid
39	Canine Gene Marker	BacCan	\$279.00
40	Carbon dioxide, Titrimetric	CO2	No Bid
41	Carbonaceous BOD	cBOD	\$49.00
42	Chloride, Mercuric Nitrate Method	Cl	No Bid
43	Chlorine residual, DPD	ClR	No Bid
44	Chlorine residual, Iodometric	CIRI	No Bid
45	Chlorophyll A	CHLA	\$59.00
46	Chromium, Hexavalent	Cr6	\$49.00
47	Chromium, Total - Seawater	Cr-SW	\$94.00
48	Chromium, Total - Sediment	Cr-S	\$34.00
49	Chromium, Total, ICP-MS	Cr	\$24.00
50	Coliform, Fecal, Membrane Filtration	FC	No Bid
51	Coliform, Total & Fecal, MF	TFC	No Bid
52	Coliform, Total, Membrane Filtration	TC	No Bid
53	Coliphage, Male Specific (F+)	FColiphage	No Bid
54	Coliphage, Somatic	SomColiphage	No Bid
55	Color, Spectrophotometric	COLOR	\$24.00
56	Conductivity	EC	\$7.00
57	Copper - Sediment	Cu-S	\$34.00
58	Copper, ICP-MS	Cu	\$24.00
59	Copper, Total - Seawater	Cu-SW	\$94.00

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	Individual Determination	Analysis & Billing Code	Unit Price
60	Cyanide - Sediment	CN-S	\$54.00
61	Cyanide, Amenable	CNA	\$54.00
62	Cyanide, Total, Distillation & Photometry	CND	\$64.00
63	Dicofol – Sediment	DICO-S	\$144.00
64	Dicofol	DICO	\$144.00
65	Diquat	DIQ	No Bid
66	Dissolved Oxygen, Winkler Titration	DO	No Bid
67	E. Coli, Membrane Filtration	ECO	No Bid
68	Enterococcus, Membrane Filtration	ENT	No Bid
69	Fluoride	F	\$24.00
70	Glyphosate	GLYP	\$224.00
71	Gull Gene Marker	Gull2Taq	\$279.00
72	Hardness, EDTA	HARD	\$12.00
73	Human-specific HF183 Bacteriodes Gene Marker	HF183	\$279.00
74	Human-specific HF183 Bacteriodes Gene Marker - Sediment	HF183-S	\$289.00
75	Imazamox	IMM	No Bid
76	Imazapyr	IMP	No Bid
77	Iron - Sediment	Fe-S	\$34.00
78	Iron, ICP-MS	Fe	\$24.00
79	Isotope Analysis of Hydrogen (2H/1H) in Water	2Н	No Bid
80	Isotope Analysis of Oxygen (180/160) in Water	180	\$84.00
81	Lead - Seawater	Pb-SW	\$94.00
82	Lead - Sediment	Pb-S	\$34.00
83	Lead, ICP-MS	Pb	\$24.00
84	Lipids - Tissue	%LIPID-T	\$24.00
85	Lithium - Sediment	Li-S	\$34.00
86	Lithium, ICP-MS	Li	\$24.00
87	Magnesium - Sediment	Mg-S	\$34.00
88	Magnesium, ICP	Mg-ICP	No Bid
89	Magnesium, ICP-MS	Mg	\$24.00
90	Manganese - Sediment	Mn-S	\$34.00
91	Manganese, ICP-MS	Mn	\$24.00
92	MBAS, Colorimetric	MBAS	\$54.00
93	Mercury - Sediment	Hg-S	\$34.00
94	Mercury, Cold Vapor	Hg	\$34.00
95	Microbial Source Tracking	MST	\$279.00
96	Moisture - Sediment	%MSTR	\$19.00
97	Moisture - Tissue	%MSTR-T	\$19.00

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	Individual Determination	Analysis & Billing Code	Unit Price
98	Molybdenum - Seawater	Mo-SW	\$94.00
99	Molybdenum - Sediment	Mo-S	\$34.00
100	Molybdenum, ICP-MS	Мо	\$24.00
101	MTBE - Sediment	MTBE-S	\$94.00
102	Nickel - Seawater	Ni-SW	\$94.00
103	Nickel - Sediment	Ni-S	\$34.00
104	Nickel, ICP-MS	Ni	\$24.00
105	Nitrate + Nitrite as NO3	NO3/NO2 -IC	\$20.00
106	Nitrate + Nitrite as NO3	NO3/NO2	\$24.00
107	Nitrate as N	NO3-N	\$20.00
108	Nitrite, (Spectrophotometric)	NO2	\$20.00
109	Nitrogen, Ammonia Direct	NH3-D	\$20.00
110	Nitrogen, Ammonia Distilled	NH3	No Bid
111	Nitrogen, Total	TN	\$49.00
112	Nitrogen, Total in Sediment	TN-S	\$59.00
113	Nitrogen, Total Kjeldahl	TKN	\$39.00
114	Nonylphenol	ALKYL PHEN	\$134.00
115	Odor	ODOR	No Bid
116	Oil & Grease – Sediment	OG-S	\$54.00
117	Oil & Grease, Partition Gravimetric	OGPG	\$54.00
118	Organic Carbon, Dissolved	DOC	\$44.00
119	Organic Carbon, Total - Sediment	TOC-S	\$59.00
120	Organic Carbon, Total	ТОС	\$39.00
121	Particle Size Distribution	PS	\$94.00
122	Pentachlorophenol	PENTA	\$134.00
123	Perchlorate	PERC	\$89.00
124	Petroleum Hydrocarbons, Total as Gasoline	TPH as Gasoline	\$69.00
125	pH	pH	\$6.00
126	pH in Sediment	pH-S	\$8.00
127	Phosphate, Ortho (IC)	PO4O	\$15.00
128	Phosphorus, Total - Sediment	P-S	\$34.00
129	Phosphorus, Total	Р	\$24.00
130	Potassium	K	\$24.00
131	Potassium, ICP	K-ICP	No Bid
132	Residue, Settleable Solids (SS)	SSR	\$11.00
133	Residue, Total Filterable (TFR or TDS), dried at 180°C	TDS	\$11.00
134	Residue, Total Nonfilterable (TN, FR or TSS)	TSS	\$11.00
135	Residue, Total Volatile Nonfilterable (VSS)	VSS	\$11.00

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	Individual Determination	Analysis & Billing Code	Unit Price
	ignition at 550°C		
136	Residue, Total Volatile Solids (TVS), ignition at 550°C	TVS	\$11.00
137	Salinity	SAL	\$24.00
138	Selenium - Seawater	Se-SW	\$94.00
139	Selenium - Sediment	Se-S	\$34.00
140	Selenium, ICP-MS	Se	\$24.00
141	Selenium – Tissue	Se-T	\$99.00
142	Silica, Dissolved	SiO2	\$11.00
143	Silver - Seawater	Ag-SW	\$94.00
144	Silver - Sediment	Ag-S	\$34.00
145	Silver, ICP-MS	Ag	\$24.00
146	Sodium, ICP	Na-ICP	No Bid
147	Solids - Sediment	%SOLID	\$19.00
148	Stable Isotopes, Dissolved Nitrate (Nitrogen-15, Oxygen-18)	15N18O	\$79.00
149	Stable Isotopes, Dissolved Sulfate (Sulfur-34, Oxygen-18)	34S18O	No Bid
150	Sulfate	SO4	\$14.00
151	Sulfide, Dissolved	SD	\$24.00
152	Sulfide, Total – Sediment	SUL-S	\$34.00
153	Sulfide, Total	ST	\$19.00
154	Sulfite	SO3	No Bid
155	Sulfur, Total - Sediment	ST-S	No Bid
156	Sulfur, Total	S	No Bid
157	Suspended Sediment Concentration	SSC	\$59.00
158	Thallium - Seawater	Tl-SW	\$94.00
159	Thallium - Sediment	T1-S	\$34.00
160	Thallium, ICP-MS	Tl	\$24.00
161	Tin - Seawater	Sn-SW	\$94.00
162	Tin - Sediment	Sn-S	\$34.00
163	Tin, ICP-MS	Sn	\$24.00
164	Tributyl Tin	TBT	\$191.00
165	Triclopyr	TRICLPYR	\$169.00
166	Turbidity	TURB	\$9.00
167	UV Absorbance @ 254 nm	UV 254	No Bid
168	Vanadium - Seawater	V-SW	\$94.00
169	Vanadium - Sediment	V-S	\$34.00
170	Vanadium, ICP-MS	V	\$24.00
171	Zinc - Seawater	Zn-SW	\$94.00

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Attachment C

	Individual Determination	Analysis & Billing Code	Unit Price
172	Zinc - Sediment	Zn-S	\$34.00
173	Zinc, ICP-MS	Zn	\$24.00

C. Additional Rates:

	Job Title	Hourly Rate
1.	Lab Director/ Manager	\$124.00
2.	Supervising Chemist	\$99.00
3.	Project Manager	\$104.00
4.	Technicians	\$44.00
5.	Clerical Staff	\$39.00
6.	Aqueous Sample Filtration (flat rate per sample)	\$14.00

- D. <u>Holiday Surcharge: With County Project Manager or designee's approval, County shall pay a 10% surcharge</u> to the normal unit cost if any portion of the Contractors laboratory analyses is conducted on a major holiday (Thanksgiving, Christmas, New Year's, Memorial Day, 4th July, Labor Day). Results of analyses from these special requests that are reported after the due date will not be eligible for the surcharge and will be subject to penalties (10% per week this is the standard penalty rate for normal turn-around time lab reports).
- E. <u>Rush Surcharge</u>: With County Project Managers approval, County shall pay a 80% surcharge to the normal unit cost rate for 24 hour analyses reported within that time period. For 48 hour, 72 hour, and 7-day rush analyses, the surcharge would be 50%, 30%, and 20%, respectively. Rush samples reported after the due date will not be eligible for the surcharge and will be subject to the penalties (10% per 24 hour period for the first 7 days; for 7-day rush, 10% penalty per 7 day period).
- F. <u>Additional Work</u>: Any additional Work, as discussed above in Attachment A, Section IV, item F must be approved in writing by the County Project Manager.
- 3. **Price Increase/Decreases:** No price increases will be permitted during the first year of the Contract. The County requires documented proof of cost increases on Contracts prior to any price adjustment. A minimum of 180-days advance notice in writing is required to secure such adjustment. No retroactive price adjustments will be considered. All price decreases will automatically be extended to the County of Orange. The County may enforce, negotiate, or cancel escalating price Contracts or take any other action it deems appropriate, as it sees fit. The net dollar amount of profit will remain firm during the period of the Contract. Adjustments increasing the Contractor's profit will not be allowed.
- 4. **Firm Discount and Pricing Structure:** Contractor guarantees that prices quoted are equal to or less than prices quoted to any other local, State or Federal government entity for services of equal or lesser scope. Contractor agrees that no price increases shall be passed along to the County du ring the term of this Contract not otherwise specified and provided for within this Contract.

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- 5. **Contractor's Expense:** The Contractor will be responsible for all costs related to photo copying, telephone communications and fax communications while on County sites during the performance of work and services under this Contract.
- 6. **Payment Terms Payment in Arrears:** Invoices are to be submitted in arrears to the user agency/department to the ship-to address, unless otherwise directed in this Contract. Contractor shall reference Contract number on invoice. Payment will be net 30 days after receipt of an invoice in a format acceptable to the County of Orange and verified and approved by the agency/department and subject to routine processing requirements. The responsibility for providing an acceptable invoice rests with the Contractor.

Billing shall cover services and/or goods not previously invoiced. The Contractor shall reimburse the County of Orange for any monies paid to the Contractor for goods or services not provided or when goods or services do not meet the Contract requirements.

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

- 7. **Taxpayer ID Number:** The Contractor shall include its taxpayer ID number on all invoices submitted to the County for payment to ensure compliance with IRS requirements and to expedite payment processing.
- 8. **Payment Invoicing Instructions*:** The Contractor will provide an invoice on the Contractor's letterhead for goods delivered and/or services rendered. In the case of goods, the Contractor will leave an invoice with each delivery. Each invoice will have a number and will include the following information:
 - A. Contractor's name and address
 - B. Contractor's remittance address, if different from "A" above
 - C. Contractor's Taxpayer ID Number
 - D. Name of County Agency/Department
 - E. Delivery/Service address
 - F. Master Agreement (MA) or Purchase Order (PO) number
 - G. Agency/Department's Account Number
 - H. Date of invoice
 - I. Product/Service description, quantity, and prices
 - J. Sales tax, if applicable
 - K. Freight/Delivery charges, if applicable
 - L. Total
 - * See attachment D for further invoice instruction.

Invoices and support documentation are to be forwarded to:

OC Public Works/Procurement Services Attn: Accounts/Payables 601 North Ross Street Santa Ana, CA 92701 Email: <u>accountspayables@ocpw.ocgov.com</u> Contractor has the option of receiving payment directly to their bank account via an Electronic Fund Transfer (EFT) process in lieu of a check payment. Payment made via EFT will also receive Electronic Remittance Advice with the payment details via email. An email address will need to be provided to the County via an EFT Authorization Form. To request a form, please contact the DPA.

ATTACHMENT C STAFFING PLAN

1. <u>Key personnel to perform Contract duties</u>:

Name	Classification/Designation
Ceasar Nwadine	Laboratory Director
Richard Gossett	Technical Director
Meagan Rivera	Quality Assurance Director
Rachel Hanen	Project Manager

Substitution or addition of Contractor's key personnel in any given category or classification shall be allowed only with prior written approval of the County Project Manager.

The Contractor may reserve the right to involve other Contractor personnel, as their services are required. The specific individuals will be assigned based on the need and timing of the service/classification required. Assignment of additional key personnel shall be subject to County written approval. County reserves the right to have any of Contractor personnel removed from providing services to County under this Contract. County is not required to provide any reason for the request for removal of any Contractor personnel.

2. <u>Subcontractor(s)</u>

Listed below are subcontractor(s) anticipated by Contractor to perform services specified in Attachment A. Substitution or addition of Contractor's subcontractors in any given project function shall be allowed only with prior written approval of County's Project Manager.

Company Name &	Contact Name and	Project Function
Address	Telephone Number	
Enthalpy Analytical	Diane Galvan 714-771-9928	COD
931 W. Barkley Ave.		BOD
Orange, CA 92868		CBOD
		COD
		Perchlorate
		TPHs
		VOCs
Eurofins Calscience	Don Burley 714-895-5494	1,4-Dioxane
7440 Lincoln Way	x202	
Garden Grove, CA 92841-		
1427		
Bureau Veritas Laboratories	Stephanie Pollen 905 817	Dioxins
299 Cayuga Rd. c/o FedEx	5830	
Depot		
Cheektowaga, NY 14225		

Weck Labs 14859 East Clark Avenue City of Industry, CA 91745	Brandon Gee (626) 336- 2139x133	Carbamates
UC Davis Stable Isotope Facility 387 N Quad Ave, Room 1210 PES Davis, CA 95616	Kate Pecsok Ewert 530-754- 7517	Isotopes
North Coast Labs 5680 West End Road Arcata, CA 95521	Roxanne Golich-Moore 707- 822-4649	Chlorinated Herbicides Glyphosate
Weston Solutions, Inc. 5817 Dryden Place, Suite 101 Carlsbad, CA 92008	Alexander Schriewer 760 795-6957	Gene Markers MST
Fruit Growers Laboratories, Inc. 853 Corporation Street Santa Paula, CA 93060	Glenn Olsen 805 392-2054	Radioactivity

ATTACHMENT D Format for Analytical Services Invoicing

(CONTRACTOR LETTERHEAD)

		Contract No.	
Bill to:	OC Public Works/Procurement	Invoice No.*	
	Services Attn: Accounts/Payables	Lab Request No. +	
	601 North Ross Street	Project No(s). from CoC	
	Santa Ana, CA 92701	Invoice Date:	
		Invoice Due Date:	
	Email: accountspayables@ocpw.ocgov.com	Tax Payer I.D. No.	

Example of itemized billing:

Contractor Lab Number	OC Public Works Sample Number	Billing and Analysis Code	Unit Cost	Sample Quantity	Total Cost
2000-2005	1234001-006	DOC	20.00	6	\$120.00
2006-2008	1234007-009	NUT	50.00	3	\$150.00
			Inv	voice Total	\$270.00

Note:

- 1. If amended invoice code "R" after Contractor Invoice No.
- 2. If amended lab request code "R" after lab request number.
- 3. These abbreviations to be taken from the approved price list for analyses from the IFB.
- 4. If unit price is different from that established in the Price Agreement code x after unit price with explanation (e.g. rush surcharge or late report penalty)
- 5. If requested analysis is coded as a group, the invoice must provide a total price for that group of analyses and not individual costs for each of the analyses performed.

ATTACHMENT E FORMAT FOR ELECTRONIC DATA REPORT (EDR) OF ANALYTICAL RESULTS

(Submitted as a tilde (~) separated text file by electronic mail. The below format is subject to change. If changes are made, the County will notify and work with Contractor to implement the changes.)

Description of EDR Structure

Note: All fields must be present in each file. Successive separators (~~) with no spaces may be used for null values but only when the column is not required. Line 1 of the file will list the field name. Reported results will begin on line 2.

ID	Field Name	Required	Datatype	Notes
1	lab_name	Y	text	The subcontract laboratory unique Identifier.
2	submission_date	Y	date (MM/DD/YYYY HH24:MI)	The date the file was submitted: this helps uniquely identify the submission and any subsequent resubmissions.
3	qc_group	Y	text	The batch used to associate samples together for a particular test: Typically, this would be the prep batch where the QC was created. If no prep is performed for the test, specify the analytical batch. This value used in conjunction with the lab_name will be the unique batch identifier.
4	lab_group		text	The specific test grouping: typically used to "bin" like analyses together (Metals, Volatiles, etc.)
5	lab_sample_id	Y	text	The subcontract lab's specific identification for an analyzed sample.
6	cust_sample_id	* - see Notes	text	 Unique identifier supplied by the County used to track the sample throughout the sampling and analysis processes. Production samples (those sent out) will have a cust_sample_id representing the County sample ID; QC generated by the subcontract lab will not and this field will be null. If this record represents a <u>non</u>-County original, then this value <u>must</u> be set to "NON-PROJECT".
7	matrix	Y	text	The matrix of the sample
8	collect_date		date (MM/DD/YYYY HH24:MI)	The date / time the sample was collected
9	receive_date		date (MM/DD/YYYY HH24:MI)	The date / time the sample was received
10	prep_batch		text	Sub contract lab prep batch, if applicable

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ID	Field Name	Required	Datatype	Notes
11	ana_batch		text	Sub contract lab analytical batch
12	sample_type	Y	text	The type of sample collected or analyzed (e.g., SAMPLE, LCS, MS).
13	original_sample	* - see Notes	text	Original samples are production samples which are related to other QC. Typically DUPs, MS, MSDs, etc. If a record from these types of samples are included, its parent (original) subcontract lab sample number (unique ID) must be placed in this field to provide a linkage back to the original.
14	paired_sample	* - see Notes	text	Paired samples are spiked samples which have a relationship with another sample for the purposes of calculation of RPDs (an LCSD is a duplicate of an LCS). This field would be required for sample types of LCSD or MSD. If a record from these types of samples are included, its related sample (paired) subcontract lab sample number (unique ID) must be placed in this field to provide the appropriate linkage.
15	result_type	Y	text	This is the type of result. Valid Values are: <i>TRG</i> for target compounds; <i>SPK</i> for spiked analytes; and <i>SUR</i> for surrogates.
16	analyst	Y	text	The initials of the laboratory user who performed the analysis
17	analysis_date	Y	date (MM/DD/YYYY HH24:MI)	The date the analysis was performed.
18	analysis_method	Y	text	The method used by the laboratory to analyze the sample. CEDEN valid vocabulary must be used if already registered with the state database.
19	prep_date		date (MM/DD/YYYY HH24:MI)	The date the preparation was performed. If none, this field can be left blank.
20	prep_method		text	The digestion or extraction method performed on the sample prior to analysis. If no preparatory method, it can be left blank. CEDEN valid vocabulary must be used if already registered with the state database.
21	dilution	Y	number	Default value should be 1, if no dilution is performed
22	compound_name	Y	text	The name of the analyte or parameter for which the test is conducted and result is reported. CEDEN valid vocabulary must be used if already registered with the state database.

ID	Field Name	Required	Datatype	Notes
23	result		text	This is a multi-purpose field whose contentsvaries based on sample type and result_type.For Production samples the value is the resultfor the TRG compound. For spiked QCsamples, the recovered amont is stored here (aSPK result_type). For SUR result_types therecovered_amount for the surrogate is placedhere.
24	qualifier		text	The description of any special conditions, situations or outliers that occurred during or prior to the analysis. Multiple qualifiers can be placed in this field with a ' ' pipe delimiter.
25	result_units		text	The result measurement unit. CEDEN valid vocabulary must be used if already registered with the state database.
26	mdl		number	The MDL (method detection limit) is the lowest possible calculated detection limit associated with a given method and analyte.
27	pql		number	The PQL (practical quantitation limit) of the sample analyzed is the minimum value below which data are documented as non-quantifiable, as determined by the laboratory.
28	basis		text	Results reported on wet or dry basis. Valid Values are <i>WET</i> ; <i>DRY</i> ; or <i>NA</i>
29	fraction		text	Part (or whole) of the target analyte for the test. Valid Values are <i>TOTAL</i> ; or <i>DISSOLVED</i>
30	spike_conc		number	This field contains the expected value from the analysis of a spiked QC sample (SPK result_type). SUR result_type records also require this field.
31	spike_lcl		number	The lower control limits for a spiked QC sample (SPK result_type). SUR result_type records also require this field.
32	spike_ucl		number	The upper control limits for a spiked QC sample (SPK result_type). SUR result_type records also require this field.
33	spike_recovery		number	The calculated %recovery from the analysis of a spiked QC sample (SPK result_type). SUR result_type records also require this field.
34	rpd		number	The calculated RPD from the analysis of a duplicate spike QC sample (SPK result_type).
35	rpd_cl		number	The upper control limit for the calculated RPD of a duplicate spike QC sample (SPK result_type).

ID	Field Name	Required	Datatype	Notes
36	lab_action_type		text	Special Actions that the lab may have performed on the data. This field can be populated with one of two values: CLEANUP and PRESERVE . An example would be using PRESERV , providing a <u>date</u> in the lab_action_type field and then providing a <i>preservation technique</i> in lab_action_data , e.g "lab filtered" or "lab settled" or "lab acidified", etc
37	lab_action_date		Date (MM/DD/YYYY HH24:MI)	The date the "action" was performed. If no lab_action_type is used this field should be blank (null).
38	lab_action_data		text	Any special value that needs to be associated to the data set on which the action was performed. It is not required that the comment be on every record in the data set; but it must be on at least one.
39	batch_cmts		text	Any special notes or comments that need to be associated to the batch. Multiple comments can be placed in this field with a ' ' pipe delimiter.
40	sample_cmts		text	Any special notes or comments that need to be associated to the sample. Multiple comments can be placed in this field with a ' ' pipe delimiter. It is not required that the comment be on every record for the sample but it must be on at least one.
41	analyte_cmts		text	Any special notes or comments that need to be associated to the analyte. Multiple comments can be placed in this field with a ' ' pipe delimiter.

Linking Sample Types

Sample Type	Original_sample	Paired_sample
Blank	Left blank	Left blank
Lab Control Sample (LCS)	Left blank	Left blank
Lab Control Sample Duplicate (LCSD)	Left blank	Paired LCS Lab ID
Matrix Spike	Sample's Lab ID	Left blank
Matrix Spike Duplicate	Sample's Lab ID	Paired MS Lab ID
Production Sample	Left blank	Left blank
Duplicate	Sample's Lab ID	Left blank
NON-PROJECT	Left blank	Left blank

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ATTACHMENT F Format for Electronic Analytical Services Invoicing

(Submitted as a text file by electronic mail. The below format is subject to change. If changes are made, the County will notify and work with Contractor to implement the changes.)

	Comments
FORMAT=INVOICE	{Line 1} FORMAT=INVOICE line required. Must be first non- comment line.
MA-080-17010712	{Line 2} Purchase Agreement number (always preceded with MA,)
LN,115131,8/21/03	{Line 3} Laboratory Request Number (linked to EDR), date of invoice (always preceded by LN,)
DC,TFR,3,60,180	{Line 4} Analysis billing code, number of analyses, unit price per analysis (or group analysis), subtotal (always preceded by LN,)
DC,NUT,4,145,580	{Line 5} Analysis billing code, number of analyses, unit price per analysis (or group analysis), subtotal (always preceded by LN,)
Т,760	{Line 6} Total of invoice associated with above Laboratory Request Number (always preceded with T,)
LN,115132,8/24/03	{Line 7} Laboratory Request Number (linked to EDR), date of invoice (always preceded by LN,)
DC,BACTIMF,2,65,130	{Line 8} Analysis billing code, number of analyses, unit price per analysis (or group analysis), subtotal (always preceded by LN,)
T,130	{Line 9} Total of invoice associated with above Laboratory Request Number (always preceded with T,)

Note:

- 1. Filename must include lab identifier, e.g. LABNAME0511104INV.txt, and must be unique (including data files)
- 2. Files submitted are in text format (.txt)
- 3. Use only valid codes for analysis type
- 4. If amended invoice code "R" after Laboratory Request Number (e.g. 115131R)
- 5. Comment lines are allowed on any line (preceded with C,)
- 6. If unit price is different from that established in the Price Agreement code X after unit price (e.g. TRF,3,70X,210)
- 7. If requested analysis is coded as a group, the invoice must provide a total price for that group of analyses and not individual costs for each of the analyses performed.
- 8. One file can include as many series of LN, DC,T combinations as desired.

Attachment G Format for Analyses Details Report

The report will include the contracting laboratory name and effective date as a document heading. The minimum required information in the report will be a data table with the columns listed below. Acceptable file formats are .PDF, .docx, and .xlsx. Please provide the EPA approved method for an associated analyses when applicable.

Column	Description	
Analysis Code	The analysis billing code listed in the contract or agreed upon billing code for additional work not listed in the contract	
Method	The analysis method	
Parameter	The target analyte	
Units	Unit of measure	
MDL	Method detection limit	
RL	The reporting limit of the parameter	
Hold Time	The allowable amount of time between collection and extraction/analysis	
Container Type	The required container for the parameter and method of analysis	