# OFFICE OF THE CITY ATTORNEY ROBERT E. SHANNON, City Attorney 333 West Ocean Boulevard, 11th Floor Long Beach, CA 90802-4664

#### AGREEMENT

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THIS AGREEMENT is made and entered, in duplicate, as of October 21, 2010, for reference purposes only, pursuant to a minute order adopted by the City Council of the City of Long Beach at its meeting on October 12, 2010, by and between KINNETIC LABORATORIES, INC., a California corporation ("Consultant"), with a place of business at 2750 E. Spring Street, Suite 190, Long Beach, California 90806, and the CITY OF LONG BEACH, a municipal corporation ("City").

WHEREAS, City requires specialized services requiring unique skills to be performed in connection with conducting municipal stormwater runoff and dry weather quality monitoring services ("Project"); and

WHEREAS, City has selected Consultant in accordance with City's administrative procedures and City has determined that Consultant and its employees are qualified, licensed, if so required, and experienced in performing these specialized services; and

WHEREAS, City desires to have Consultant perform these specialized services, and Consultant is willing and able to do so on the terms and conditions in this Agreement;

NOW, THEREFORE, in consideration of the mutual terms, covenants, and conditions in this Agreement, the parties agree as follows:

#### 1. SCOPE OF WORK OR SERVICES.

A. Consultant shall furnish specialized services more particularly described in Exhibit "A", attached to this Agreement and incorporated by this reference, in accordance with the standards of the profession, and City shall pay for these services in the manner described below, not to exceed One Million Two Hundred Thousand Dollars (\$1,200,000), at the rates or charges shown in Exhibit "B".

B. Consultant may select the time and place of performance for

these services; provided, however, that access to City documents, records and the like, if needed by Consultant, shall be available only during City's normal business hours and provided that milestones for performance, if any, are met.

- C. Consultant has requested to receive regular payments. City shall pay Consultant in due course of payments following receipt from Consultant and approval by City of invoices showing the services or task performed, the time expended (if billing is hourly), and the name of the Project. Consultant shall certify on the invoices that Consultant has performed the services in full conformance with this Agreement and is entitled to receive payment. Each invoice shall be accompanied by a progress report indicating the progress to date of services performed and covered by the invoice, including a brief statement of any Project problems and potential causes of delay in performance, and listing those services that are projected for performance by Consultant during the next invoice cycle. Where billing is done and payment is made on an hourly basis, the parties acknowledge that this arrangement is either customary practice for Consultant's profession, industry or business, or is necessary to satisfy audit and legal requirements which may arise due to the fact that City is a municipality.
- D. Consultant represents that Consultant has obtained all necessary information on conditions and circumstances that may affect its performance and has conducted site visits, if necessary.
- E. CAUTION: Consultant shall not begin work until this Agreement has been signed by both parties and until Consultant's evidence of insurance has been delivered to and approved by City.
- 2. <u>TERM</u>. The term of this Agreement shall commence at midnight on October 1, 2010, and shall terminate at 11:59 p.m. on September 30, 2013, unless sooner terminated as provided in this Agreement, or unless the services or the Project is completed sooner.

#### COORDINATION AND ORGANIZATION.

A. Consultant shall coordinate its performance with City's representative, if any, named in Exhibit "C", attached to this Agreement and incorporated by this reference. Consultant shall advise and inform City's representative of the work in progress on the Project in sufficient detail so as to assist City's representative in making presentations and in holding meetings on the Project. City shall furnish to Consultant information or materials, if any, described in Exhibit "D", attached to this Agreement and incorporated by this reference, and shall perform any other tasks described in the Exhibit.

- B. The parties acknowledge that a substantial inducement to City for entering this Agreement was and is the reputation and skill of Consultant's key employee, Marty L. Stevenson. City shall have the right to approve any person proposed by Consultant to replace that key employee.
- 4. <u>INDEPENDENT CONTRACTOR</u>. In performing its services, Consultant is and shall act as an independent contractor and not an employee, representative or agent of City. Consultant shall have control of Consultant's work and the manner in which it is performed. Consultant shall be free to contract for similar services to be performed for others during this Agreement; provided, however, that Consultant acts in accordance with Section 9 and Section 11 of this Agreement. Consultant acknowledges and agrees that (a) City will not withhold taxes of any kind from Consultant's compensation; (b) City will not secure workers' compensation or pay unemployment insurance to, for or on Consultant's behalf; and (c) City will not provide and Consultant is not entitled to any of the usual and customary rights, benefits or privileges of City employees. Consultant expressly warrants that neither Consultant nor any of Consultant's employees or agents shall represent themselves to be employees or agents of City.

#### INSURANCE.

A. As a condition precedent to the effectiveness of this Agreement, Consultant shall procure and maintain, at Consultant's expense for the

- (a) Commercial general liability insurance (equivalent in scope to ISO form CG 00 01 11 85 or CG 00 01 10 93) in an amount not less than \$1,000,000 per each occurrence and \$2,000,000 general aggregate. This coverage shall include but not be limited to broad form contractual liability, cross liability, independent contractors liability, and products and completed operations liability. City, its boards and commissions, and their officials, employees and agents shall be named as additional insureds by endorsement (on City's endorsement form or on an endorsement equivalent in scope to ISO form CG 20 10 11 85 or CG 20 26 11 85 or both CG 20 10 07 04 and CG 20 37 07 04 or both CG 20 33 07 04 and CG 20 37 07 04), and this insurance shall contain no special limitations on the scope of protection given to City, its boards and commissions, and their officials, employees and agents. This policy shall be endorsed to state that the insurer waives its right of subrogation against City, its boards and commissions, and their officials, employees and agents.
- (b) Workers' Compensation insurance as required by the California Labor Code and employer's liability insurance in an amount not less than \$1,000,000. This policy shall be endorsed to state that the insurer waives its right of subrogation against City, its boards and commissions, and their officials, employees and agents.
- (c) Professional liability or errors and omissions insurance in an amount not less than \$1,000,000 per claim.
  - (d) Commercial automobile liability insurance (equivalent in scope

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to ISO form CA 00 01 06 92), covering Auto Symbol 1 (Any Auto) in an amount not less than \$500,000 combined single limit per accident.

- self-insured Any self-insurance program, retention. or B. deductible must be separately approved in writing by City's Risk Manager or designee and shall protect City, its officials, employees and agents in the same manner and to the same extent as they would have been protected had the policy or policies not contained retention or deductible provisions.
- Each insurance policy shall be endorsed to state that C. coverage shall not be reduced, non-renewed or canceled except after thirty (30) days prior written notice to City, shall be primary and not contributing to any other insurance or self-insurance maintained by City, and shall be endorsed to state that coverage maintained by City shall be excess to and shall not contribute to insurance or self-insurance maintained by Consultant. Consultant shall notify City in writing within five (5) days after any insurance has been voided by the insurer or cancelled by the insured.
- If this coverage is written on a "claims made" basis, it must D. provide for an extended reporting period of not less than one hundred eighty (180) days, commencing on the date this Agreement expires or is terminated, unless Consultant guarantees that Consultant will provide to City evidence of uninterrupted, continuing coverage for a period of not less than three (3) years, commencing on the date this Agreement expires or is terminated.
- Consultant shall require that all subconsultants or contractors E. that Consultant uses in the performance of these services maintain insurance in compliance with this Section unless otherwise agreed in writing by City's Risk Manager or designee.
- Prior to the start of performance, Consultant shall deliver to F. City certificates of insurance and the endorsements for approval as to sufficiency and form. In addition, Consultant shall, within thirty (30) days prior to expiration of

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the insurance, furnish to City certificates of insurance and endorsements evidencing renewal of the insurance. City reserves the right to require complete certified copies of all policies of Consultant and Consultant's subconsultants and contractors, at any time. Consultant shall make available to City's Risk Manager or designee all books, records and other information relating to this insurance, during normal business hours.

- G. Any modification or waiver of these insurance requirements shall only be made with the approval of City's Risk Manager or designee. Not more frequently than once a year, City's Risk Manager or designee may require that Consultant, Consultant's subconsultants and contractors change the amount, scope or types of coverages required in this Section if, in his or her sole opinion, the amount, scope or types of coverages are not adequate.
- H. The procuring or existence of insurance shall not be construed or deemed as a limitation on liability relating to Consultant's performance or as full performance of or compliance with the indemnification provisions of this Agreement.
- This Agreement 6. ASSIGNMENT AND SUBCONTRACTING. contemplates the personal services of Consultant and Consultant's employees, and the parties acknowledge that a substantial inducement to City for entering this Agreement was and is the professional reputation and competence of Consultant and Consultant's Consultant shall not assign its rights or delegate its duties under this employees. Agreement, or any interest in this Agreement, or any portion of it, without the prior approval of City, except that Consultant may with the prior approval of the City Manager of City, assign any moneys due or to become due Consultant under this Agreement. Any attempted assignment or delegation shall be void, and any assignee or delegate shall acquire no right or interest by reason of an attempted assignment or delegation. Furthermore, Consultant shall not subcontract any portion of its performance without the prior approval of the City Manager or designee, or substitute an approved subconsultant

- 7. <u>CONFLICT OF INTEREST</u>. Consultant, by executing this Agreement, certifies that, at the time Consultant executes this Agreement and for its duration, Consultant does not and will not perform services for any other client which would create a conflict, whether monetary or otherwise, as between the interests of City and the interests of that other client. And, Consultant shall obtain similar certifications from Consultant's employees, subconsultants and contractors.
- 8. <u>MATERIALS</u>. Consultant shall furnish all labor and supervision, supplies, materials, tools, machinery, equipment, appliances, transportation and services necessary to or used in the performance of Consultant's obligations under this Agreement, except as stated in Exhibit "D".
- 9. OWNERSHIP OF DATA. All materials, information and data prepared, developed or assembled by Consultant or furnished to Consultant in connection with this Agreement, including but not limited to documents, estimates, calculations, studies, maps, graphs, charts, computer disks, computer source documentation, samples, models, reports, summaries, drawings, designs, notes, plans, information, material and memorandum ("Data") shall be the exclusive property of City. Data shall be given to City, and City shall have the unrestricted right to use and disclose the Data in any manner and for any purpose without payment of further compensation to Consultant. Copies of Data may be retained by Consultant but Consultant warrants that Data shall not be made available to any person or entity for use without the prior approval of City. This warranty shall survive termination of this Agreement for five (5) years.
- 10. <u>TERMINATION</u>. Either party shall have the right to terminate this Agreement for any reason or no reason at any time by giving fifteen (15) calendar days prior notice to the other party. In the event of termination under this Section, City shall pay Consultant for services satisfactorily performed and costs incurred up to the effective

date of termination for which Consultant has not been previously paid. The procedures for payment in Section 1.B. with regard to invoices shall apply. On the effective date of termination, Consultant shall deliver to City all Data developed or accumulated in the performance of this Agreement, whether in draft or final form, or in process. And, Consultant acknowledges and agrees that City's obligation to make final payment is conditioned on Consultant's delivery of the Data to City.

- shall not disclose the Data or use the Data directly or indirectly, other than in the course of performing its services, during the term of this Agreement and for five (5) years following expiration or termination of this Agreement. In addition, Consultant shall keep confidential all information, whether written, oral or visual, obtained by any means whatsoever in the course of performing its services for the same period of time. Consultant shall not disclose any or all of the Data to any third party, or use it for Consultant's own benefit or the benefit of others except for the purpose of this Agreement.
- a breach of confidentiality with respect to Data that: (a) Consultant demonstrates Consultant knew prior to the time City disclosed it; or (b) is or becomes publicly available without breach of this Agreement by Consultant; or (c) a third party who has a right to disclose does so to Consultant without restrictions on further disclosure; or (d) must be disclosed pursuant to subpoena or court order.

#### 13. <u>ADDITIONAL COSTS AND REDESIGN</u>.

A. Any costs incurred by City due to Consultant's failure to meet the standards required by the scope of work or Consultant's failure to perform fully the tasks described in the scope of work which, in either case, causes City to request that Consultant perform again all or part of the Scope of Work shall be at the sole cost of Consultant and City shall not pay any additional compensation to Consultant for its re-performance.

B. If the Project involves construction and the scope of work requires Consultant to prepare plans and specifications with an estimate of the cost of construction, then Consultant may be required to modify the plans and specifications, any construction documents relating to the plans and specifications, and Consultant's estimate, at no cost to City, when the lowest bid for construction received by City exceeds by more than ten percent (10%) Consultant's estimate. This modification shall be submitted in a timely fashion to allow City to receive new bids within four (4) months after the date on which the original plans and specifications were submitted by Consultant.

- 14. <u>AMENDMENT</u>. This Agreement, including all Exhibits, shall not be amended, nor any provision or breach waived, except in writing signed by the parties which expressly refers to this Agreement.
- 15. <u>LAW</u>. This Agreement shall be governed by and construed pursuant to the laws of the State of California (except those provisions of California law pertaining to conflicts of laws). Consultant shall comply with all laws, ordinances, rules and regulations of and obtain all permits, licenses and certificates required by all federal, state and local governmental authorities.
- 16. <u>ENTIRE AGREEMENT</u>. This Agreement, including all Exhibits, constitutes the entire understanding between the parties and supersedes all other agreements, oral or written, with respect to the subject matter in this Agreement.

#### 17. INDEMNITY.

A. Consultant shall indemnify, protect and hold harmless City, its Boards, Commissions, and their officials, employees and agents ("Indemnified Parties"), from and against any and all liability, claims, demands, damage, loss, obligations, causes of action, proceedings, awards, fines, judgments, penalties, costs and expenses, including attorneys' fees, court costs, expert and witness fees, and other costs and fees of litigation, arising or alleged to have arisen, in whole or in part, out of or in connection with (1) Consultant's breach or failure to

- B. In addition to Consultant's duty to indemnify, Consultant shall have a separate and wholly independent duty to defend Indemnified Parties at Consultant's expense by legal counsel approved by City, from and against all Claims, and shall continue this defense until the Claims are resolved, whether by settlement, judgment or otherwise. No finding or judgment of negligence, fault, breach, or the like on the part of Consultant shall be required for the duty to defend to arise. City shall notify Consultant of any Claim, shall tender the defense of the Claim to Consultant, and shall assist Consultant, as may be reasonably requested, in the defense.
- C. If a court of competent jurisdiction determines that a Claim was caused by the sole negligence or willful misconduct of Indemnified Parties, Consultant's costs of defense and indemnity shall be (1) reimbursed in full if the court determines sole negligence by the Indemnified Parties, or (2) reduced by the percentage of willful misconduct attributed by the court to the Indemnified Parties.
- D. The provisions of this Section shall survive the expiration or termination of this Agreement.
- 18. <u>AMBIGUITY</u>. In the event of any conflict or ambiguity between this Agreement and any Exhibit, the provisions of this Agreement shall govern.
- 19. <u>COSTS</u>. If there is any legal proceeding between the parties to enforce or interpret this Agreement or to protect or establish any rights or remedies under it, the prevailing party shall be entitled to its costs, including reasonable attorneys' fees.

#### 20. NONDISCRIMINATION.

A. In connection with performance of this Agreement and subject

to applicable rules and regulations, Consultant shall not discriminate against any employee or applicant for employment because of race, religion, national origin, color, age, sex, sexual orientation, gender identity, AIDS, HIV status, handicap or disability. Consultant shall ensure that applicants are employed, and that employees are treated during their employment, without regard to these bases. These actions shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

B. It is the policy of City to encourage the participation of Disadvantaged, Minority and Women-Owned Business Enterprises in City's procurement process, and Consultant agrees to use its best efforts to carry out this policy in its use of subconsultants and contractors to the fullest extent consistent with the efficient performance of this Agreement. Consultant may rely on written representations by subconsultants and contractors regarding their status. Consultant shall report to City in May and in December or, in the case of short-term agreements, prior to invoicing for final payment, the names of all subconsultants and contractors hired by Consultant for this Project and information on whether or not they are a Disadvantaged, Minority or Women-Owned Business Enterprise, as defined in Section 8 of the Small Business Act (15 U.S.C. Sec. 637).

21. <u>EQUAL BENEFITS ORDINANCE</u>. Unless otherwise exempted in accordance with the provisions of the Ordinance, this Agreement is subject to the applicable provisions of the Equal Benefits Ordinance (EBO), section 2.73 et seq. of the Long Beach Municipal Code, as amended from time to time.

A. During the performance of this Agreement, the Consultant certifies and represents that the Consultant will comply with the EBO. The Consultant agrees to post the following statement in conspicuous places at its

place of business available to employees and applicants for employment:

"During the performance of a contract with the City of Long Beach, the Consultant will provide equal benefits to employees with spouses and its employees with domestic partners. Additional information about the City of Long Beach's Equal Benefits Ordinance may be obtained from the City of Long Beach Business Services Division at 562-570-6200."

- B. The failure of the Consultant to comply with the EBO will be deemed to be a material breach of the Agreement by the City.
- C. If the Consultant fails to comply with the EBO, the City may cancel, terminate or suspend the Agreement, in whole or in part, and monies due or to become due under the Agreement may be retained by the City. The City may also pursue any and all other remedies at law or in equity for any breach.
- D. Failure to comply with the EBO may be used as evidence against the Consultant in actions taken pursuant to the provisions of Long Beach Municipal Code 2.93 et seq., Contractor Responsibility.
- E. If the City determines that the Consultant has set up or used its contracting entity for the purpose of evading the intent of the EBO, the City may terminate the Agreement on behalf of the City. Violation of this provision may be used as evidence against the Consultant in actions taken pursuant to the provisions of Long Beach Municipal Code Section 2.93 et seq., Contractor Responsibility.
- 22. <u>NOTICES</u>. Any notice or approval required by this Agreement shall be in writing and personally delivered or deposited in the U.S. Postal Service, first class, postage prepaid, addressed to Consultant at the address first stated above, and to City at 333 West Ocean Boulevard, Long Beach, California 90802, Attn: City Manager, with a copy to the City Engineer at the same address. Notice of change of address shall be given in the same manner as stated for other notices. Notice shall be deemed given on the date deposited in the mail or on the date personal delivery is made, whichever occurs

first.

#### 23. COPYRIGHTS AND PATENT RIGHTS.

- A. Consultant shall place the following copyright protection on all Data: © City of Long Beach, California \_\_\_\_\_, inserting the appropriate year.
- B. City reserves the exclusive right to seek and obtain a patent or copyright registration on any Data or other result arising from Consultant's performance of this Agreement. By executing this Agreement, Consultant assigns any ownership interest Consultant may have in the Data to City.
- C. Consultant warrants that the Data does not violate or infringe any patent, copyright, trade secret or other proprietary right of any other party. Consultant agrees to and shall protect, defend, indemnify and hold City, its officials and employees harmless from any and all claims, demands, damages, loss, liability, causes of action, costs or expenses (including reasonable attorney's fees) whether or not reduced to judgment, arising from any breach or alleged breach of this warranty.
- 24. COVENANT AGAINST CONTINGENT FEES. Consultant warrants that Consultant has not employed or retained any entity or person to solicit or obtain this Agreement and that Consultant has not paid or agreed to pay any entity or person any fee, commission or other monies based on or from the award of this Agreement. If Consultant breaches this warranty, City shall have the right to terminate this Agreement immediately notwithstanding the provisions of Section 10 or, in its discretion, to deduct from payments due under this Agreement or otherwise recover the full amount of the fee, commission or other monies.
- 25. <u>WAIVER</u>. The acceptance of any services or the payment of any money by City shall not operate as a waiver of any provision of this Agreement or of any right to damages or indemnity stated in this Agreement. The waiver of any breach of this Agreement shall not constitute a waiver of any other or subsequent breach of this Agreement.

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- 27. TAX REPORTING. As required by federal and state law, City is obligated to and will report the payment of compensation to Consultant on Form 1099-Misc. Consultant shall be solely responsible for payment of all federal and state taxes resulting from payments under this Agreement. Consultant shall submit Consultant's Employer Identification Number (EIN), or Consultant's Social Security Number if Consultant does not have an EIN, in writing to City's Accounts Payable, Department of Financial Management. Consultant acknowledges and agrees that City has no obligation to pay Consultant until Consultant provides one of these numbers.
- 28. <u>ADVERTISING</u>. Consultant shall not use the name of City, its officials or employees in any advertising or solicitation for business or as a reference, without the prior approval of the City Manager or designee.
- 29. <u>AUDIT</u>. City shall have the right at all reasonable times during the term of this Agreement and for a period of five (5) years after termination or expiration of this Agreement to examine, audit, inspect, review, extract information from and copy all books, records, accounts and other documents of Consultant relating to this Agreement.
- 30. <u>THIRD PARTY BENEFICIARY</u>. This Agreement is not intended or designed to or entered for the purpose of creating any benefit or right for any person or entity of any kind that is not a party to this Agreement.

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	1	IN WITNESS WHEREOF, the parties have caused this document to be duly				
	2	executed with all formalities required by law as of the date first stated above.				
	3	KINNETIC LABORATORIES, INC., a California comporation				
	5	Nortember 2010 By Satrick Kinney				
	6	Patrick Kingen				
	7	Type or Print Name				
	8	November , 2010 By Mangaret A Corport				
	9	MARGARET A. CARPENTER Type or Print Name				
	10					
	11	"Consultant"				
ORNEY / Attorney 11th Floor 4664	12	CITY OF LONG BEACH, a municipal corporation				
City At 22, 48, 114, 28, 48, 48, 48, 48, 48, 48, 48, 48, 48, 4	13	Assistant City Manager				
OFFICE OF THE CITY ATTORNEY (OBERT E. SHANNON, City Attome 33 West Ocean Boulevard, 11th Flo Long Beach, CA 90802-4864	14	City Managerecuted Pursuant TO SECTION 301 OF				
OFFICE OF THE CITY ROBERT E. SHANNON 333 West Ocean Bouley Long Beach, CA 90	15	"City" THE CITY CHARTER				
FICE OF TH ERT E. SHA West Ocean Long Beach	16	This Agreement is approved as to form on, 2010.				
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## **EXHIBIT A**



#### 3.1 SCOPE OF SERVICES

The Consultant will provide water quality monitoring services, maintain existing equipment, and provide any additional equipment necessary to meet the City's monitoring requirements. The City owns monitoring equipment currently installed at each of the four existing mass emission monitoring sites. All water monitoring will follow 40 CFR 122.41(j) as required in the City's NPDES permit (http://www.longbeach.gov/pw/stormwater\_management/municipal\_permit.asp), page 24 of 34, Item B#1 through #5, with details of implementation as directed by the City with concurrence of the Regional Board.

The activities to be performed under this contract will include water quality sampling, equipment operations and maintenance, field observations, analytical laboratory testing, bioassay testing with Toxicity Identification Evaluations (TIEs), data analyses, data interpretation, annual report preparation, assistance with presentations to regulatory agencies, meeting attendance, and general consulting with the City on the stormwater monitoring program. Assistance with revisions to the program may be required as necessitated by the NPDES permit conditions, ongoing monitoring results, and the Regional Board, including cooperation and participation in certain regional studies.

A range of special studies may be required over the life of the permit. These may include a wide range of topics requiring a wide range of experience in water quality, sediment quality, toxicology, and biology. Special studies would typically focus on evaluation of stormwater impacts.

#### 3.2 Mass Emission Monitoring Site Location

Monitoring sites specified in the permit are as follows:

- Basin 14: Dominguez Gap Pump Station Monitoring Site
- Basin 20: Bouton Creek Monitoring Site
- Basin 23: Belmont Pump Station Monitoring Site
- Portions of Basins 18, 19, 27 and 29: Los Cerritos Channel Monitoring Site

#### 3.3 Monitoring Equipment

Each of the four mass emission monitoring sites has been equipped with telemetered, automatic flow-compositing stormwater samplers. These systems include acoustic Doppler flow meters and/or pressure transducers, a datalogger/control module, cellular or landline telecommunications equipment, a rain gauge, and a peristaltic sampler. The Bouton Creek site also incorporates a pressure and multiple conductivity sensors for accomplishing the required discharge sampling at this intertidal site.

All equipment installed at the monitoring site is owned by the City. It is expected that two of the autosamplers will need to be replaced over the next few years. Most other equipment has been recently upgraded and replaced. The Consultant, however, will be responsible for calibration and maintenance of all equipment at these existing sites, including replacement of any disposal items such as deep cycle marine batteries.



#### 3.4 Sampling Frequencies

#### 3.4.1 Wet Weather Events

Four storm events are to be monitored each year during the wet-weather period between October 1 and April 15 for each of the four mass emission monitoring sites.

Stormwater monitoring (for TSS only) is also required at the four mass emission sampling sites during all storm events where rainfall is forecast to equal or exceed 0.25 inches.

#### 3.4.2 Dry Weather Events

Inspections and water quality sampling are to be done twice during the dry weather season at each of three mass emission monitoring sites. Dry weather flows are now permanently diverted from one of the monitoring sites. Typically, one sampling is carried out early in the summer (e.g., May-June) and one later (e.g., September).

#### 3.5 Samples and Observations

#### 3.5.1 Wet Weather Events

Flow measurements and rainfall data are to be continuously recorded at each of the four mass emission stations throughout the wet weather season. During all rain events, the frequency of recording will be increased so that the flow hydrograph and rain gauge data can be obtained and real-time control of the sampler can be accomplished. A flow-composited water quality sample is required from each of the mass emission stations for chemical analysis and toxicity testing for four storm events per year. In addition, grab samples are to be taken during the rising or near the peak of the hydrograph for oil and grease, total recoverable petroleum hydrocarbons (TRPH), total and fecal coliform, and enterococcus testing.

During all additional events exceeding 0.25 inches of rainfall, flow-composited samples will be obtained from each mass emission site and analyzed only for total suspended solids (TSS).

#### 3.5.2 Dry Weather Events

Inspections at each site will include whether water is present and whether this water is flowing or just ponded. At sites that are found not to have flowing water, inspections will be conducted in the upstream drains to verify that flow is not occurring into the site. When flowing water is present at one of these mass emission sites, then water quality measurements, flow estimates, and water samples will be taken along with observation of site conditions. Temperature, conductivity, and oxygen are to be measured at the site. For stations where flowing water is encountered, time-composited samples are to be taken along with grab samples (oil & grease, TRPH, and bacteria). Where possible, time composites are to be taken over a 24-hour period in order to ensure that representative samples are obtained.



On occasion, elevated pH levels have been observed at two of the sites. When high pH levels occur, immediate upstream investigations must b eperformed to assist in determining if the pH excursions are due to in-stream effects or can be attributed to specific source areas.

#### 3.6 Laboratory Analysis

#### 3.6.1 Chemical Anlysis

The initial water quality constituents selected for this program were established based upon the requirements of the City's NPDES permit for stormwater discharges. Based upon the early results of this monitoring program, the Regional Board has modified the analyte list and the required target detection limits. The current list of required chemical analytes, analytical methods, holding times, and reporting limits is given in Table 1.

#### 3.6.2 Toxicity Analysis

The toxicity of each discharge sample is to be evaluated using two chronic test methods: the water flea (*Ceriodaphnia dubia*) reproduction and survival test (freshwater) and the purple sea urchin (*Strongylocentrotus purpuratus*) fertilization test (marine). Toxicity testing is to be conducted on flow-rated composites samples from all sites except the Dominguez Gap Pump Station.

Toxicity Identification Evaluations (TIEs) are to be run on discharge samples that exhibit substantial (□2 TU<sub>c</sub> baseline toxicity for water fleas and □3 TU<sub>c</sub> for sea urchins),in order to determine the characteristics of the toxins present. This strategy provides one full TU<sub>c</sub> above the minimum detection lmiit of each test to allow assessment of the primary toxin. Four or five treatments are applied to each sample. These treatments are particle removal, trace metal chelation, nonpolar organic extraction, organophosphate deactivation (except urchins) and chemical reduction. With the exception of organics extraction, each treatment is applied independently on a salinity-adjusted sample. Test methods are given in Table 2. A maximum of two TIEs are to be conducted for each species at each station during the wet weather season. During dry weather monitoring, a maximum of one TIE is required to be conducted for each species at each station.

Toxicity testing of the Dominguez Pump Station discharge was eliminated by the Regional Board prior to the 2002/2003 monitoring program.

#### 3.7 Quality Assurance

Internal laboratory quality control checks include the use of internal standards, method blanks, matrix spike/spike duplicates, duplicates, laboratory control spikes, and Standard Reference Materials. Data validation is to be performed in accordance with the National Functional Guidelines for Low Level Organic Data Review and Inorganic Data Review (EPA540-R-00-006), and Guidance on the Documentation and Evaluation of Trace Metals Data Collected for the Clean Water Act Compliance Monitoring (EPA/821/B/95/002).



External QA/QC must include a blind duplicate from one site for each event given the availability of adequate sample volume.

Toxicity testing quality assurance procedures are to be specific for each test protocol specified. These quality assurance procedures are to include control samples and a reference toxicant test to document the health of test organisms and the validity of the test conditions. Results are also to be compared to established performance criteria for control survival, reproduction, reference toxicant sensitivity, sample storage, and test conditions. Any deviations from the performance criteria such as control charts are to be noted in the laboratory records and prompted corrective action, ranging from a repeat of the test to adjustment of laboratory equipment. These are to include detailed monitoring and documentation of all test conditions.

#### 3.8 Reporting

Two types of reports will be required: Monthly Contract Progress Reports and Annual Stormwater Monitoring Reports. The Monthly Contract Progress Reports will be provided with each invoice submittal as internal tracking documents. The Annual Stormwater Monitoring Reports are required to be submitted to the Regional Board as permit compliance.

Required contents of the Annual Monitoring Report are specified in the NPDES permit. At a minimum, the report must provide comparisons with appropriate benchmark water quality levels and provide estimates of annual pollutant loads from each mass emission monitoring station. The report shall also provide a complete analysis of all data collected by the program to date and provide recommendations for improvements or program adjustments that would help to better address overall program objectives.

A draft of the Annual Stormwater Monitoring Report will be prepared in accordance with NPDES permit requirements, page 15 of 34, Item H.1.a, b and c) and will be submitted to the Public Works Department by the consultant. The draft report is to be submitted on or before June 30<sup>th</sup> of each year. A final report will be submitted ot the Department each year that will contain corrections based upon review comments and will be suitable for submission to the Regional Board by July 15<sup>th</sup> for permit compliance. All chemical and bioassay data are to be maintained in a database format suitable to the City and any special requirements that may be specified by the Regional Board.

#### 3.9 Consultation, Presentations, and Meetings

In addition to the monitoring program elements defined above, assistance may be required for presentations to regulatory agencies, for project meetings attendance, and for general consulting with the City on the stormwater monitoring program. Assistance with revisions to the program may be required as necessitated by the NPDES permit conditions, ongoing monitoring results, and by the Regional Board, including cooperation/participation in certain regional studies.

A minimum of three to four meetings each year will be required with the Public Works Department to exchange necessary information, discuss the proposed work, set up a schedule of activities, and to present findings of the study to the Regional Board.



Table 1 Analytical Methods, Holding Times and Reporting Limits

Analyte and Reporting Unit	EPA Method No.	Holding Time	Target Reporting Limit
Chlorinated Pesticides (µg/L)			
Aldrin	8081A	7 days	0.005
alpha-BHC	8081A	7 days	0.01
beta-BHC	8081A	7 days	0.005
delta-BHC	8081A	7 days	0.005
gamma-BHC (lindane)	8081A	7 days	0.02
alpha-Chlordane	8081A	7 days	0.1
gamma-Chlordane	8081A	7 days	0.1
4,4'-DDD	8081A	7 days	0.05
4,4'-DDE	8081A	7 days	0.05
4,4'-DDT	8081A	7 days	0.01
Dieldrin	8081A	7 days	0.01
Endosulfan I	8081A	7 days	0.02
Endosuflan II	8081A	7 days	0.01
Endosulfan sulfate	8081A	7 days	0.05
Endrin	8081A	7 days	0.01
Endrin Aldehyde	8081A	7 days	0.01
Heptachlor	8081A	7 days	0.01
Heptachlor Epoxide	8081A	7 days	0.01
Toxaphene	8081A	7 days	0.5
PCBs (µg/L)			
Aroclor-1016	8081A	7 days	0.5
Aroclor-1221	8081A	7 days	0.5
Aroclor-1232	8081A	7 days	0.5
Aroclor-1242	8081A	7 days	0.5
Aroclor-1248	8081A	7 days	0.5
Aroclor-1254	8081A	7 days	0.5
Aroclor-1260	8081A	7 days	0.5
Total PCBs	8081A	7 days	0.5
ORGANOPHOSPHATE PESTICIDES (µg/L)	3		
Diazinon	8141A	7 days	0.01
Chlorpyrifos (Dursban)	8141A	7 days	0.05
Malathion	8141A	7 days	1.0
Prometryn	8141A	7 days	1.0
Atrazine	8141A	7 days	1.0
Simazine	8141A	7 days	1.0
Cyanazine	8141A	7 days	1.0
CONVENTIONAL PARAMETERS			
Oil and Grease (mg/L)	1664	28 days	5.0
Total Phenois (mg/L)	420.1	28 days	0.1
pH (units)	150.1	ASAP	0-14

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Orthophosphate-P (mg/L)	365.3	48 hours	0.01
Total Phosphorus (mg/L)	365.3	28 days	0.05
Analyte and Reporting Unit	EPA Method	<b>Holding Time</b>	Target Reporting
	No.		Limit
Turbidity (NTU)	180.1	48 hours	1.0
Total Suspended Solids (mg/L)	160.2	7 days	1.0
Total Dissolved Solids (mg/L)	160.1	7 days	1.0
Volatile Suspended Solids (mg/L)	160.4	7 days	1.0
Total Organic Carbon (mg/L)	415.1	28 days	1.0
Biochemical Oxygen Demand (mg/L)	405.1	48 hours	4.0
Chemical Oxygen Demand (mg/L)	410.1	28 days	4.0
Total Ammonia-Nitrogen (mg/L)	350.2	28 days	0.1
Total Kjeldahl Nitrogen (mg/L)	351.3	28 days	0.1
Nitrite Nitrogen (mg/L)	300.0	48 hours	0.1
Nitrate Nitrogen (mg/L)	300.0	48 hours	0.1
Alkalinity, as CaCO3 (mg/L)	310.1	48 hours	5.0
Specific Conductance (µmhos/cm)	120.1	48 hours	1.0
Total Hardness (mg/L)	130.2	180 days	1.0
MBAS (mg/L)	425.1	48 hours	0.02
Chloride (mg/L)	300.0	48 hours	1.0
Fluoride (mg/L)	300.0	48 hours	0.1
BACTERIA (MPN/100 ml)			
Total Coliform	SM 9221B	6 hours	<20
Fecal Coliform	SM 9221B	6 hours	<20
Enterococcus	SM 9230C	6 hours	<20
TOTAL AND DISSOLVED METALS			
(μg/L)¹			
Aluminum	200.8	180 days	100
Arsenic	200.8	180 days	0.5
Cadmium	200.8	180 days	0.25
Chromium	200.8	180 days	0.5
Copper	200.8	180 days	0.5
Iron	236.1	180 days	25
Lead	200.8	180 days	0.5
Nickel	200.8	180 days	1.0
Selenium	200.8	180 days	1.0
Silver	200.8	180 days	.25
Zinc	200.8	180 days	1.0

<sup>1.</sup> Samples to be analyzed for dissolved metals are to be filtered within 48 hours.

Table 2 Toxicity Testing and Toxicity Identification Evaluations (TIEs)

Test Type	SPECIES	METHOD	END POINTS
	BIOASSA	AY TESTING	
Water Flea	Ceriodaphnia dubia	USEPA 1994c	6-8 day survival and reproduction
Sea Urchin	Strongylocentrotus	USEPA	20 minute fertilization test



	purpuratus	1995b	
	TOXICITY IDENTIFICATION E	VALUATION	S (TIEs) Phase I
Freshwater	Ceriodaphnia dubia	USEPA 1991	96 hour survival
Marine	Strongylocentrotus purpuratus	USEPA 1996	20 minute fertilization test

#### References Cited

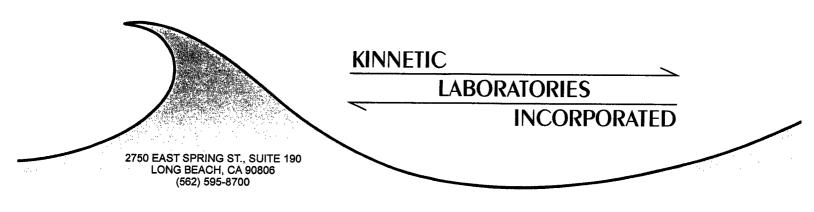
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## **EXHIBIT B**



#### KINNETIC LABORATORIES, INC.

#### **RATE SCHEDULE**

(7/01/2010 - 9/30/2013)

PROFESSIONAL CATEGORY	<b>HOURLY RATE</b>
SCIENTIST V / PRINCIPAL	\$ 164.61
SCIENTIST IV / PROJECT MANAGER	\$ 141.39
SCIENTIST III	\$ 125.24
SCIENTIST II	\$ 96.13
SCIENTIST I	\$ 82.22
TECHNICAL EDITOR	\$ 86.37



### KINNETIC LABORATORIES, INC. DIRECT COSTS AND TRAVEL SCHEDULE

ITEM	COST		
Black & White Copying			
Color Copying / Printing	\$0.05/Page		
Postage/Shipping	\$0.20/Page		
Vans/Pick-Up Trucks	Actual		
	\$75/Day		
Service Trucks w/ Traffic Safety Equipment & Tools Vehicle Miles	\$125/Day		
Per Diem	\$0.50/Mile		
*			
Lodging Meals	Actual		
	\$40.00/Day		
Parking/Tolls	Actual		
Airfare	Actual		
Rental Vehicles	Actual		
Computer, Portable	\$25/Day		
Camera, Digital	\$25/Day		
Storm Water Monitoring			
Basic Station	\$1,000/Month		
Security Enclosure	\$300/Month		
Composite Sample Container (20liter)	\$50/Month		
Depth Sensor	\$200/Month		
Velocity/Flow Sensor	\$500/Month		
Rain Gauge	\$100/Month		
Cellular Telephone Link	\$100/Month		
Solar Panel	\$50/Month		
AC Power	Actual		
Refrigerated Sampler (requires AC Power)	\$500/Month		
Datalogger			
Datalogger/Controller	\$50/Day		
Interface Device	\$25/Day		
Multiplexer Device	\$25/Day		
	ΨΣJIDay		
Confined Space Entry Equipment	\$150/Day		



# KINNETIC LABORATORIES, INC. DIRECT COSTS AND TRAVEL SCHEDULE (continued)

ITEM	COST	
Field Meters		
Anemometer	Φ0.5 /F)	
Conductivity and Temperature	\$25/Day	
Dissolved Oxygen	\$35/Day	
Nephelometer	\$35/Day	
pH	\$75/Day	
Multi-parameter SONDE	\$35/Day \$95/Day	
Boats	·	
34' Research Vessel: D.W. Hood	\$1,500/Day	
30' Research Vessel: Prophesy	\$1,350/Day	
21' Zodiac Mark 5	\$450/Day	
17' Boston Whaler	\$350/Day	
14' Jon Boat	\$100/Day	
13' Zodiac Mark 3	\$300/Day	
15 hp Outboard Engine	\$75/Day	
A-Frame w/ Puller Motor, for Whaler & Zodiac	\$50/Day	
Navigation		
GPS, Differential w/ Base Station	\$175/Day	
GPS, Differential w/ Beacon Receiver	\$175/Day \$55/Day	
Mini Ranger	\$250/Day	
Transit Surveyor	\$50/Day	
	\$30/ <b>Da</b> y	
Water Sampling		
Diaphragm Pump, Teflon	\$25/Day	
Go Flo Bottle	\$25/Day	
Niskin Bottle w/ Messenger	\$25/Day	
Peristaltic Pump	\$75/Day	
Valskon Sampler	\$60/Day	
VIPS, Trace Metals Sampler	\$250/Day	
Dive Operations		
Communication Gear, Diver to Diver or Diver to Ship	\$50/Day	
SCUBA	\$95/Pers./Day	



# KINNETIC LABORATORIES, INC. DIRECT COSTS AND TRAVEL SCHEDULE (continued)

	COST	
Sediment Sampling		
Gravity Core, 3-1/2" X 8' w/ Butyrate Liners	\$125/Day	
Gravity Core, 1-3/4" X 2' w/ Butyrate Liners	\$75/Day	
Hand Core, Stainless-Steel	\$50/Day	
Vibracore, 4" diameter up to 20' length w/ Generator	\$750/Day	
Bucket Dredge, Stainless-Steel, 40-Gal. Capacity	\$200/Day	
Gray/O'Hara Box Core, Halar Coated	\$150/Day	
Smith/McIntyre, Halar Coated	\$100/Day	
Smith/McIntyre, Galvanized Steel	\$75/Day	
Van Veen, 0.1 m2, Halar Coated w/ Cage	\$100/Day	
Van Veen, 0.1 m2, Stainless-Steel w/ Cage	\$75/Day	
Van Veen, 0.1 m2, Kynar Coated	\$100/Day	
Van Veen, 0.06 m2, Stainless-Steel	\$50/Day	
Ponar Grab, 0.06 m2, Galvanized Steel	\$50/Day	
Sediment Mixer, Hobart (30-Gal. Capacity)	\$150/Day	
Oceanographic Monitoring		
CTD w/ D.O., pH & Transmissivity	\$400/Day	
Current Meter, Doppler	\$2,000/Month	
Current Meter, Acoustic	\$800/Month	
Current Meter, Rotor	\$500/Month	
Current Meter, Tape Reader	\$100/Day	
Drogue	\$35/Day	
Fluorometer	\$150/Day	
Fluorometer w/ Data Logger	\$175/Day	
OBS, D&A, w/ Pressure Housing and Data Logger	\$500/Month	
Underwater Beacon	\$150/ Month	
Underwater Beacon Locator	\$150/Day	
Release, Acoustic	\$400/Month	
Release, Acoustic, Command Unit	\$300/Day	
Thermistor Chain, 16 Array	\$750/Month	
Thermistor Chain, 8 Array	\$600/Month	
Benthic and Bioaccumulation		
Benthic Sampling Sieves, Table, Supplies	\$50/Day	
Crab Trap, Plastic	\$25/Day	
Long-Line Fishing Gear	\$25/Day	
Otter Trawl, 25'	\$100/Day	
Otter Trawl, 16'	\$90/Day	



## Biological Testing – Kinnetic Laboratories - ToxScan, Inc. Division

BIOASSAY TESTING/ BIOACCUMULATION EXPOSURES				
Species	Method	1 <sup>ST</sup> Sample Price	Additional Sample Price	
	Marine and Estuarine			
Sediment Particulate Phase Bioassa				
Mytilus edulis / M. galloprovinciallis	EPA/600/R-95/136	\$1400	\$390	
Americaopsis bahia	EPA-821-R-02-014	\$1320	\$525	
Menidia beryllina	EPA-821-R-02-014	\$1320	\$525	
Sediment Phase Bioassays – 10 day				
Ampelisca abdita	EPA/600/R-94/025	\$2250	\$700	
Neanthes arenaceodentata	ASTM E 1611-94	\$2250	\$700	
Nephtys caecoides	ASTM E 1611-94	\$2250	\$700	
Rhepoxynius abronius	EPA/600/R-94/025	\$2250	\$700	
Eohaustorius estuarius	EPA/600/R-94/025	\$2250	\$700	
Chronic Bioassays				
Haliotis rufescens	EPA/600/R-95/136	\$1400	\$390	
Strongylocentrotus purpuratus	EPA/600/R-95/136	\$1275	\$330	
Macrocystis pyrifera	EPA/600/R-95/136	\$1620	\$445	
Atherinops affinis	EPA/600/R-95/136	\$2400	\$1440	
Menidia beryllina	EPA-821-R-02-014	\$2400	\$1440	
28-Day Bioaccumulation Exposures				
Nereis virens	EPA-823-B-98	\$3625	\$990	
Nephtys caecoides	EPA-823-B-98	\$3625	\$990	
Macoma nasuta	EPA-823-B-98	\$3625	\$990	
Fresh Water				
Chronic Bioassays				
Ceriodaphnia dubia	EPA-821-R-02-013 (5 dilutions)	\$1500	\$1080	
Pimephales promelas	EPA-821-R-02-013 (5 dilutions)	\$1980	\$1140	
Selenastrum capricornutum	EPA-821-R-02-013 (5 dilutions)	\$960	\$480	
Sediment Phase Bioassays – 10 day				
Hyalella azteca	EPA/600/R-99/064 Method 100.1	\$2250	\$1100	
Chironomus tentaris	EPA/600/R-99/064 Method 100.2	\$2160	\$1100	
28-Day Bioaccumulation Exposures				
Lumbriculus variegatus	EPA/600/R-99/064 Method 100.3	\$3625	\$990	
Corbicula fluminense	EPA-823-B-98 (modified)	\$3625	\$990	

TOXICITY IDENTIFICATION EVALUATION (TIE) TESTING		
Species/Methods	Unit Cost	
Ceriodaphnia dubia		
Phase 1, EPA/600/6-91/003	\$4500	
Phase 2, EPA/600/R-92/080	\$6500	
Phase 3, EPA/600/R-92/081	\$4000	
Pimephales promelas		
Phase 1, EPA/600/6-91/003	\$5500	
Phase 2, EPA/600/R-92/080	\$7000	
Phase 3, EPA/600/R-92/081	\$4500	
Haliotis rufescens		
Phase 1, EPA/600/6-91/003	\$4500	
Phase 2, EPA/600/R-92/080	\$6500	
Phase 3, EPA/600/R-92/081	\$4500	
Selenastrum capricornutum		
Phase 1, EPA/600/6-91/003	\$4500	
Phase 2, EPA/600/R-92/080	\$6000	
Phase 3, EPA/600/R-92/081	\$4500	
Hyalella azteca (Sediment Pore Water)		
Phase 1, EPA/600/6-91/003	\$6000	
Phase 2, EPA/600/R-92/080	\$7500	
Phase 3, EPA/600/R-92/081	\$7500	

# EXHIBIT "C"

City's Representative:
Anthony Arevalo
(562) 570-6023

# EXHIBIT "D"

Materials/Information Furnished: None