

STANDARD AGREEMENT AMENDMENT

STD. 213 A (Rev 6/03)

 CHECK HERE IF ADDITIONAL PAGES ARE ATTACHED 11 Pages

AGREEMENT NUMBER 13-C0052	AMENDMENT NUMBER A-1
REGISTRATION NUMBER 1325002	

1. This Agreement is entered into between the State Agency and Contractor named below:
- STATE AGENCY'S NAME
Department of Pesticide Regulation
- CONTRACTOR'S NAME
The Regents of the University of California
2. The term of this Agreement is **December 24, 2013** through **September 30, 2016**
3. The maximum amount of this Agreement after this amendment is: **\$156,112.00**
One hundred fifty-six thousand one hundred twelve dollars and no cents
4. The parties mutually agree to this amendment as follows. All actions noted below are by this reference made a part of the Agreement and incorporated herein:

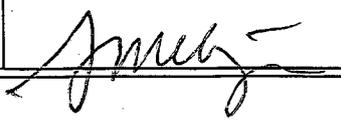
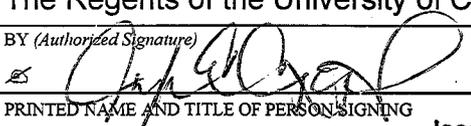
Changes made to this Agreement are shown as: Text additions are displayed in **bold and underlined** and Text deletions are displayed as **strike through text (i.e., Strike)**.

This amendment shall increase the total amount by \$88,237.00. The total amount of this Agreement shall not exceed \$156,112.00.

Exhibit A, is amended in its entirety as attached.
Exhibit B, Item 4 is amended as attached.
Exhibit B, Item 5 is amended as attached.

All other terms and conditions shall remain the same.

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

CONTRACTOR		CALIFORNIA Department of General Services Use Only <div style="border: 2px solid black; padding: 5px; text-align: center;"> APPROVED DEC 19 2014 OFFICE OF LEGAL SERVICES DEPT. OF GENERAL SERVICES </div> <input type="checkbox"/> Exempt per: 
CONTRACTOR'S NAME (If other than an individual, state whether a corporation, partnership, etc.) The Regents of the University of California		
BY (Authorized Signature) 	DATE SIGNED (Do not type) 4 Dec 2014	
PRINTED NAME AND TITLE OF PERSON SIGNING Joseph E. Garrido Contracts and Grants Officer		
ADDRESS Office of Research, Sponsored Programs 1850 Research Park Dr., #300, Davis, CA 95618		
STATE OF CALIFORNIA		
AGENCY NAME Department of Pesticide Regulation		
BY (Authorized Signature) 	DATE SIGNED (Do not type) 12-15-14	
PRINTED NAME AND TITLE OF PERSON SIGNING Samantha Lewis, Business Services Office Manager Lu Saephanh, Branch Chief		
ADDRESS 1001 I Street, 4th Floor, Sacramento, CA 95814		

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**AMENDED EXHIBIT A
STANDARD AGREEMENT**

SCOPE OF WORK

1. This Agreement is between the Department of Pesticide Regulation, hereinafter referred to as DPR, and The Regents of the University of California, hereinafter referred to as UC Davis or Contractor.
2. This Agreement will commence on the start date of **December 24, 2013** ~~December 1, 2013 as presented herein or upon final approval by the State, whichever is later~~ and no work shall begin before that time. This Agreement is of no effect unless approved by the State. Contractor shall not receive payment for work performed prior to approval of the Agreement and before receipt of notice to proceed by the Contract Manager. This Agreement shall expire on ~~December 31, 2014~~ **September 30, 2016**. The services shall be provided during normal working hours (except for ~~two~~ **up to five** storm events that could occur at any time, day or night).
3. The Project Representatives during the term of this Agreement will be:
 - A. All official communications, except invoices, from the Contractor to DPR shall be directed to the attention of the DPR Contract Manager, **Michael Ensminger**, at:

Department of Pesticide Regulation
Environmental Monitoring Branch, MS 3B
1001 I Street
P.O. Box 4015
Sacramento, CA 95812-4015
Phone (916) 324-4186 Fax (916) 324-4088
E-mail: mensminger@cdpr.ca.gov

- B. All invoices from the Contractor to DPR shall be directed to:

Department of Pesticide Regulation
Attn: Accounts Payable
P.O. Box 4015, MS 4A
Sacramento, CA 95812-4015

- C. All programmatic communications from DPR to the Contractor shall be directed to the attention of **Dr. Loren Oki**:

Dr. Loren Oki
Department of Plant Sciences, MS 6
UC Davis
One Shields Avenue
Davis, CA 95616-8780
Phone: (530) 754 4135; Fax: (530) 754 4883
Email: lroki@ucdavis.edu

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- D. All administrative communications, except payments, from DPR to the Contractor shall be directed to:

Marque Diane Vassar
UC Davis, Office of Research, Sponsored Programs
1850 Research Park Drive, Suite 300
Davis, CA 95618
Phone (530) 754-8280 Fax (530) 754-8229
Email: mdvassar@ucdavis.edu

Victoria Sissac
Contracts and Grants Analyst
Office of Research, Sponsored Programs Office
University of California, Davis
1850 Research Park Drive, Suite 300
Davis, CA 95618

Phone (530) 754-8094
E-mail: vsissac@ucdavis.edu

- E. All payments from DPR to the Contractor shall be directed to:

The Regents of the University of California
Cashier's Office
P.O. Box 989062
West Sacramento, CA 95798-9062

- F. The Project Representatives during the term of this Agreement may be changed by mutual written agreement without the necessity of formal amendment to this Agreement.

4. Contractor Responsibilities:

A. Background and Goals

It has been estimated that hundreds of millions of pounds of urban pesticides are applied annually, resulting in urban surface waters that are polluted with numerous different pesticides. Most often several different pesticides are found in surface waters simultaneously, and these combinations may have a synergetic toxic effect to aquatic organisms. A main goal of urban pesticide mitigation is to reduce pesticide runoff into surface waters. At the city level, wetlands, holding ponds, and vegetated ditches may help reduce pesticide load. Two cities in the Sacramento, CA area, Roseville and Folsom, have high levels of pesticide runoff from urban neighborhoods and are prime areas to study pesticide runoff from residential neighborhoods. DPR has monitored runoff from urban neighborhoods in Roseville CA since 2008 and make an ideal area to monitor changes in pyrethroid runoff with the adoption of the pyrethroid surface water regulations (effective July 19, 2012). DPR has only regularly monitored runoff from urban neighborhoods in Folsom since 2011, but has intensely studied a wetland in this city to determine its potential to reduce pesticide contamination of a city creek. UC Davis via Loren Oki has been instrumental in studying this wetland because their research group has established automated sampling equipment at several urban storm drain outfalls and have developed expertise with this equipment, including generating water quality and flow data on a regular basis.

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B. Work to Be Performed

Work to be performed will include monitoring (including preparation and water quality analysis [water quality data, total suspended analysis, total organic carbon analysis]) and automated sampling equipment maintenance (including downloading of water quality and flow data). Specific tasks include:

- 1) ~~Once~~ **Twice** during the Agreement, Contractor will conduct annual maintenance on the automated sampling sites in Folsom. This shall include adding new pH sensors to 3 automated sampling station sites (sites based on DPR needs, currently FOL1, FOL2, FOL3, and **FOL5**; for any changes in sites, DPR will contact contractor via written [email] notice).
- 2) Up to six times during the Agreement, just prior to each of DPR's Northern CA ~~sampling~~ **monitoring** dates, **between December 24, 2013 and December 31, 2014**, maintain four automated sampling sites and equipment; calibrate pH, conductivity, and other sensors as necessary. Clean debris from sensors and ensure that the equipment is in working condition and water quality and flow data will be obtained. Four Sites: FOL1, FOL2, FOL3, and likely FOL5 (once site is installed). Site FOL1 only needs to be maintained for water quality and flow data - no sampling. Dissolved Oxygen (DO) sensors are optional (not required) at the automated sampling sites.
- 3) **Up to six times during the Agreement just prior to DPR's Northern CA monitoring dates between January 1, 2015 and September 30, 2016 maintain three automated sampling sites and equipment; calibrate pH, conductivity, and other sensors as necessary. Clean debris from sensors and ensure that the equipment is in working condition so that water quality and flow data can be obtained. Three sites: FOL2, FOL3, and FOL5. DO sensors are optional (not required) at the automated sampling sites.**
- 4) Install automated sampling equipment at a new site in Folsom as determined by DPR (likely, FOL5, 38.649683, -121.1446), (Greenlee box or equivalent, to measure water velocity and flow, pH, conductivity, temperature, and rainfall, and to collect water samples with an automatic water sampler).
- 5) For up to six sampling trips during the Agreement, **between December 24, 2013 and December 31, 2014**, prepare sampling equipment (including bagging ice for coolers, labeling bottles, and organizing sampling containers) for DPR Northern California (Folsom, Roseville) sampling. DPR to provide all sampling supplies (excluding automated sampling equipment and supplies not required for the collection of water samples) and sampling protocol. Sampling preparation will occur at DPR warehouse, 3971 Commerce Dr., West Sacramento CA.

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- 6) For up to six sampling trips, between December 24, 2013 and December 31, 2014, including two sampling events triggered by rainfall (which could occur at any time of the day or night), assist in sampling during DPR monitoring in Northern California. DPR to provide supplies and transportation (from DPR warehouse). Contractor is responsible for collecting water samples with automated water samplers [e.g., ISCO portable sampler] during the two storm events at FOL2, FOL3, and FOL5 (when FOL5 [or equivalent]) is functional, and at FOL100 (waypoints approximately 38.64559, -121.14442).
- 7) For up to eight sampling events/trips between January 1, 2015 and June 30, 2016, including up to five storm sampling events triggered by rainfall (which could occur at any time of the day or night), collect flow or time weighted water samples with automated sampling equipment during all sampling events. Though funding is provided for up to eight sampling events, the contract manager expects the contractor to sample three storm events and three dry weather events during this time period. The contract manager and contractor acknowledge the fact that a successful sampling event may be affected by variables beyond their control and can result in the contractor collecting an insufficient amount of water to satisfy sampling requirements. Hence, the contract manager has included funding for the contractor when a missed sampling event occurs. The contractor will collect water at a maximum of two additional sampling events from January 1, 2015 to June 30, 2016 to remedy the occurrences of missed sampling events. The Contractor agrees to provide and maintain automated water sampling equipment necessary for collecting water samples during sampling events at FOL2, FOL3, FOL5 and FOL100 (FOL3 and FOL100 will not have fixed sampling equipment at the site. During sampling events automated sampling equipment will be temporarily installed and maintained by the contractor). The contractor agrees to provide automated sampling equipment capable of collecting a sufficient amount of water to satisfy sampling requirements. If theft or significant damage of automated sampling equipment should occur at FOL3 and/or FOL100 the contract manager agrees to pay the deductible required for replacement of the contractor's equipment (up to \$1,000, from supplies and equipment).
- a. Definition of a completed sampling event by contractor (either storm or dry weather sampling event) that will be included in the total of up to eight sampling (up to five storm) events:
- i. In preparation for sampling a storm event, contract manager (DPR) instructs contractor (UC Davis, Loren Oki) to set up and prepare automated sampling equipment in anticipation of sufficient rainfall as predicted by the contract manager. Contractor will collect a minimum of 30 L of water to satisfy sampling requirements.

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- ii. In preparation for a dry weather sampling event, contract manager instructs contractor to set up and prepare automated sampling equipment in an anticipation of sufficient runoff as determined by the contract manager. Contractor will collect (30 L) of water.
 - iii. During both storm and dry weather sampling events, contractor will collect sufficient flow data at FOL3, FOL5, and FOL100.
- b. Definition of an incomplete sampling event (either storm or dry weather sampling event) that will be included in the total of up to eight sampling (up to five storm) events:
- i. Any sampling event that does not meet the criteria listed above defining a complete sampling event may qualify as a missed sampling event. If this occurs the contract manager and the contractor shall determine:
 - a) What rendered the sampling event unsuccessful;
 - b) What steps should be taken to ensure the next sampling event meets the criteria of a completed event listed above;
 - c) If the event will be counted as a missed event and count towards the total of up to eight sampling events.
- 8) After DPR sampling in Northern CA, up to six times during the Agreement, between December 24, 2013 and December 31, 2014, assist in cleanup of sampling equipment and sample storage, including delivery of any samples to UC Davis for toxicity testing and dividing bulk samples into 1-L amber bottles or into 4-gallon plastic containers (from automated samplers). After the six sampling trips, the contractor will conduct TSS (total suspended sediment) or SSC (suspended sediment concentration) analysis and TOC (total organic carbon) water analysis according to DPR protocols and instruction, and cleanup any materials used in these analysis, including washing laboratory glassware. DPR to provide all supplies for analysis and cleanup. Analyses ~~W~~will occur at DPR warehouse (laboratory) in West Sacramento.
- 9) After DPR sampling in Northern CA, up to eight times during the contract between January 1, 2015 and September 30, 2016, divide bulk samples (from automated samplers) into 1-L amber bottles or into 4-gallon plastic containers. If this operation does not occur at DPR's West Sacramento warehouse (3971 Commerce Drive, West Sacramento, CA), contractor will deliver samples to the DPR warehouse. Contractor will also deliver any bottles or containers for toxicity testing to the UC Davis Aquatic Health Program, at the Aquatic Toxicology Laboratory, on Garrod Drive, Davis, California (contact Linda Deanovic, 916-812-6393, or Marie Stillway, 916-893-8432).

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- 10) Twice each month, **the contractor will** download velocity and flow data, pH, temperature, conductivity data, and rainfall totals from four sites in northern California (FOL1, FOL 2, FOL3, FOL5 [when FOL5 is completed]) and at three sites in southern California (WC2, SC2, SC3 [or equivalent sites]) and provide this information to DPR monthly. **Also, the contractor will** ~~For all sites except FOL1,~~ provide graphed flow data **(and numerical data)** in EXCEL for a five day period centered on each DPR sampling date at these sites (flow data to be graphed: 2 days before sampling, the day of sampling, and 2 days after sampling) **for all sites except FOL1. Data for FOL1 will only be downloaded from December 31, 2013 through December 31, 2014.**

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5. Table I. Project Timeline

Task Activities	FY 13/14			FY 14/15			FY 15/16			FY 16/17		
	Fall Oct-Dec	Winter Jan-Mar	Spring Apr-Jun	Summer July-Sept	Fall Oct-Dec	Winter Jan-Mar	Spring Apr-Jun	Summer July-Sept	Fall Oct-Dec	Winter Jan-Mar	Spring Apr-Jun	Summer July-Sept
1. Annual maintenance of automated sampling sites in Folsom	X	X		X	X			X	X			
2. General maintenance of automated sampling sites prior to sampling	X	X	X	X	X	X		X	X	X		
3. Install automated sampling equipment at FOL5	X	X	X	X	X	X		X	X	X		
4. Sampling preparation	X	X	X	X	X	X		X	X	X		
5. Sampling assistance	X	X	X	X	X	X		X	X	X		
6. Sample collection												
7. Sampling clean-up & basic lab TOC, SSC analysis	X	X	X	X	X	X		X	X	X		
8. Divide bulk samples												
9. Download velocity, flow data, water quality data, & Excel graphs	X	X	X	X	X	X		X	X	X		

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5. DPR's Responsibilities:

DPR shall provide contractor with sampling supplies used by DPR (but not necessarily specific equipment or supplies for the automated sampling equipment), dates of sampling, and sampling protocols and instructions. ~~DPR will also provide transportation to the sampling sites (from the DPR warehouse) for all sampling events.~~ In the equipment and supply line of the budget (Table II), DPR will also pay for equipment repairs of equipment used at the automated sampling sites, to the limit defined in Exhibit B, Item 4, Table I and within the equipment budget limit.

Exhibit B, Item 4 is amended as follows.

4. Rates

Table I – Estimated expenditures by budget line item and fiscal year.

<u>Budget Line Item</u>	<u>FY 13-14</u>	<u>FY 14-15</u>	<u>FY 15-16</u>	<u>FY 16-17</u>	<u>TOTAL</u>
1. Salaries & Wages ^①	\$16,299	\$9,746 \$23,392	\$23,392	\$0	\$26,045 \$63,083
2. Benefits ^②	\$8,991	\$5,312 \$12,748	\$12,748	\$0	\$14,303 \$34,487
3. Travel (in state) ^③	\$900	\$150 \$1,550	\$3,200	\$0	\$1,050 \$5,650
4. Supplies and minor equipment ^④	\$12,774	\$128 \$1,646	\$7,249	\$0	\$12,902 \$21,669
Subtotal	\$38,964	\$15,336 \$39,336	\$46,589	\$0	\$54,300 \$124,889
5. Overhead@25% ^⑤	\$9,741	\$3,834 \$9,834	\$11,648	\$0	\$13,575 \$31,223
Total	\$48,705	\$19,170 \$49,170	\$58,237	\$0	\$67,875 \$156,112
					Grand Total
					\$67,875 \$156,112

①Salary and wages: based on Ag Tech salary, Staff Research Associate (or equivalent), and for LR Oki (principal investigator).

②Benefits include: worker's compensation and other benefits appropriate for the title

③Invoice for payments on travel shall be based on current UC rates and guidelines. Travel is limited to trips to the sampling sites in the Sacramento CA area (includes Folsom and Roseville)

④Supplies and minor equipment include includes modem services, maintenance supplies (as calibration solutions), equipment repair (even if owned by UC Davis but used in this project, and other minor equipment appropriate for the automatic sampling equipment. Line item does not include any equipment with a unit acquisition or repair of \$5,000 or more.

⑤Indirect Cost: 25% indirect cost rate includes: depreciation of buildings and equipment, utility consumption, operations and maintenance costs, administrative services provided at the departmental and central level, and library costs.

Table II. Details on personnel costs.

FY 2013-2014

Salaries & Wages	Monthly	Number of Months	Percentage of Time	Total Amount
CE Spec (salary offset) (LR Oki)	\$6,392	7.0	4.55%	\$2,036
<u>Ag Tech. or Staff Research Associate</u> (or equivalent)	\$3,649	7.0	55.84%	\$14,263
Total Salary and Wages				\$16,299
Benefits				
CE Spec (salary offset) (LR Oki) (31.14%)	\$1,990	7.0	4.55%	\$634
<u>Ag Tech or Staff Research Associate (or equivalent)</u> (58.6%)	\$2,138	7.0	55.84%	\$8,357
Total Benefits				\$8,991
FY 13-14 Personnel & Benefits Total				\$25,290

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FY 2014-2015

Salaries & Wages	Monthly	Number of Months	Percentage of Time	Total Amount
CE Spec (salary offset) (LR Oki)	\$6,392	5 12	4.55%	\$1,454 \$3,490
Ag Tech. or Staff Research Associate (or equivalent)	\$3,649	5 12	45.45%	\$8,292 \$19,902
Total Salary and Wages				\$9,746 \$23,392
Benefits				
CE Spec (salary offset) (LR Oki) (31.14%)	\$1,990	5 12	4.55%	\$453 \$1,087
Benefits – Ag Tech or Staff Research Associate (or equivalent) (58.6%)	\$2,138	5 12	45.45%	\$4,859 \$11,661
Total Benefits				\$5,312 \$12,748
FY 14 - 15 Personnel & Benefits Total				\$15,058 \$36,140

FY 2015-2016

Salaries & Wages	Monthly	Number of Months	Percentage of Time	Total Amount
CE Spec (salary offset) (LR Oki)	\$6,392	12	4.55%	\$3,490
Ag Tech. (or equivalent)	\$3,649	12	45.45%	\$19,902
Total Salary and Wages				\$23,392
Benefits				
CE Spec (salary offset) (LR Oki) (31.14%)	\$1,990	12	4.55%	\$1,087
Benefits – Ag Tech (58.6%)	\$2,138	12	45.45%	\$11,661
Total Benefits				\$12,748
FY 15 - 16 Personnel & Benefits Total				\$36,140

Exhibit B, Item 5 is amended as follows.

5. Cost Limitation

- A. The total amount of this Agreement shall not exceed ~~\$67,875.00~~ **\$156,112.00.**
- B. It is understood and agreed that this total is an estimate and DPR will pay for only those services actually rendered as authorized by the DPR Contract Manager or his/her designee.

