1. This Agreement is entered into between the State Agency and the Contractor named below:

STATE AGENCY'S NAME
Department of Pesticide Regulation (DPR)

CONTRACTOR'S NAME
The Regents of the University of California

2. The term of this Agreement is June 1, 2012 or upon final approval by the State, which ever occurs later, through June 30, 2014.

3. The maximum amount of this Agreement is:
$300,000.00
Three hundred thousand dollars and no cents

4. The parties agree to comply with the terms and conditions of the following exhibits which are by this reference made a part of the Agreement.

Exhibit A – Scope of Work
Exhibit B – Budget Detail and Payment Provisions
Exhibit C* – General Terms and Conditions (GIA 610)
Exhibit D - Special Terms and Conditions
Exhibit E – Additional Terms and Conditions
Exhibit F – Resumes

Items shown with an Asterisk (*) are hereby incorporated by reference and made part of this agreement as if attached hereto. These documents can be viewed at http://www.cals.das.ca.gov/Standard+Language/default.htm

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

CONTRACTOR
The Regents of the University of California

BY (Authorized Signature)

DATE SIGNED (Do not type) 5/4/12

PRINTED NAME AND TITLE OF PERSON SIGNING
Kathleen P Nolan, J.D.
Associate Director, Sponsored Programs

ADDRESS
Office of Research, Sponsored Programs
1850 Research park Drive, Suite 300, Davis, CA 95618

STATE OF CALIFORNIA

AGENCY NAME
Department of Pesticide Regulation

BY (Authorized Signature)

DATE SIGNED (Do not type) 5/23/12

PRINTED NAME AND TITLE OF PERSON SIGNING
JoAnne Pawan, Assistant Director

ADDRESS
1001 I Street, Sacramento, CA 95814

California Department of General Services Use Only

APPROVED
JUN 8 2012
DEPT OF GENERAL SERVICES

Exempt per:
EXHIBIT A
STANDARD AGREEMENT

SCOPE OF WORK

1. The Regents of the University of California is hereinafter referred to as UC Davis or Contractor

2. This Agreement will commence on the start date June 1, 2012 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 June 30, 2014. The services shall be provided during normal working hours.

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, Dr. Robert Budd, at:

   Department of Pesticide Regulation
   Environmental Monitoring Branch, MS 3B
   1001 I Street
   P.O. Box 4015
   Sacramento, CA 95812-4015

   Phone (916) 445-2505    Fax (916) 324-4088
   E-mail: rbudd@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. Ron Tjeerdema:

   Dr. Ron Tjeerdema
   Department of Environmental Toxicology
   One Shields Ave
   UC Davis, CA 95616

   Phone: 530-754-5192    Fax: 530-752-3394
   Email: rstjeerdema@ucdavis.edu
EXHIBIT A
STANDARD AGREEMENT

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

Kendra Rose
Contract and Grant Analyst – Team A
Office of Research, Sponsored Programs
University of California, Davis
1850 Research Park Drive, Suite 300
Davis, CA 95618

Phone: 530-754-7999 FAX: 530-754-8367
Email Address: ktrose@ucdavis.edu

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

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. Background and Goals

Passive samplers have been used to monitor both polar and non-polar contaminants in air and water. They are often deployed for greater than 30 days making them an ideal tool to measure time-weighted concentrations over extended periods. In essence, semi-permeable membrane devices (SPMDs) and polar organic chemical integrative samplers (POCIS) measure the dissolved phase, thus mimicking aquatic organism exposure. Several studies have detected pesticides in California surface waters at concentrations that are above water quality benchmarks set for aquatic species. In particular, 2,4-D, triclopyr, bifenthrin, fipronil, diazinon, malathion and imidaclopid have been frequently detected in both northern and southern California urban and agricultural sites. To date, very few studies have employed passive samplers to measure pesticides under environmental conditions. The objectives of this study are 1) to evaluate applicability of each sampling device to measure target pesticides in the water column, 2) optimize analytical methods to extract samplers and analyze pesticides at environmentally relevant concentrations, 3) to monitor the target analytes at one coastal agricultural site and 2 urban sites, and 4) to determine the time-weighted average concentrations of each pesticide following deployment.
EXHIBIT A
STANDARD AGREEMENT

5. Work to Be Performed

A. Passive Sampler Deployment and Analysis

- Prepare sampling equipment for deployment at desired urban and agricultural sites. Deploy both SPMDs and POCIS for at least 30 days (may include overnight travel).
- Collect water quality parameters such as pH, dissolved oxygen (DO), water temperature and, if available, flow.
- Collect samplers and perform pesticide extraction and chemical analysis at the Marine Pollution Studies Laboratory near Monterey.
- Perform data summary and report writing, including summarizing and analyzing data and writing of papers relevant to the mission of DPR.

6. Project Timeline

<table>
<thead>
<tr>
<th>Activities</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Winter</td>
<td>Spring</td>
<td>Summer</td>
</tr>
<tr>
<td>1. Passive Sampling</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2. Chemical Analysis</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3. Report</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EXHIBIT B
Standard Agreement

BUDGET DETAIL AND PAYMENT PROVISIONS

1. Invoicing
   A. Upon receipt and approval of invoices by the Contract Manager for services
      performed according to the Scope of Work in Exhibit A and the terms of this
      Agreement, DPR agrees to compensate Contractor, in arrears, for actual allowable
      costs incurred as specified herein and in accordance with the rates specified herein
      or attached hereto. Incomplete or disputed invoices shall be returned to Contractor,
      unpaid, for correction.
   B. Invoices shall be itemized in accordance with the Rates detailed in Item 4 of this
      Exhibit, include the Agreement Number, and be submitted in triplicate, quarterly in
      arrears, to:

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

2. Budget Contingency Clause
   A. It is mutually agreed that if the Budget Act of the current year and/or any
      subsequent years covered under this Agreement does not appropriate sufficient
      funds for the program, this Agreement shall be of no further force and effect. In this
      event, DPR shall have no liability to pay any funds whatsoever to Contractor or to
      furnish any other considerations under this Agreement and Contractor shall not be
      obligated to perform any provisions of this Agreement.
   B. If funding for any fiscal year is reduced or deleted by the Budget Act for purposes of
      this program, DPR shall have the option to either cancel this Agreement with no
      liability occurring to DPR, or offer an Agreement Amendment to Contractor to reflect
      the reduced amount.

3. Payment
   A. Costs for this Agreement shall be computed in accordance with State Administrative
      Manual (SAM) Sections 8752 and 8752.1.
   B. Nothing herein contained shall preclude advance payments pursuant to Article 1,
      Chapter 3, Part 1, Division 3, Title 2 of the California Government Code, Sections
      11256 and 11257.
   C. Transportation and subsistence costs shall not exceed rates authorized to be paid
      UC system non-represented employees traveling within California.
   D. Contractor will be reimbursed for direct costs, other than salary costs, that are
      identified in the Contractor’s rates.
EXHIBIT B
Standard Agreement

E. Contractor will bill in arrears for costs incurred during the billing period. If applicable, salary costs will be itemized and billed by position. Documentation supporting specific salary costs will be presented if requested by DPR. Non-wage costs will be billed, in summary, according to general expense categories. A detailed report of transactions will support the billing. Individual expenditures exceeding $500.00 will be supported by a photocopy of the original documentation. Documentation in support of expenditures less than $500.00 will be presented if requested by DPR.

F. Contractor shall not commence performance of work or services until this Contract has been approved by the State. No payment will be made prior to approval nor for any work performed prior to approval of this Agreement.

G. Ten percent (10%) of each invoice shall be withheld by DPR until the completion of services performed according to the attached Scope of Work and the terms of this Agreement.

4. Rates

Table I – Cost Totals

<table>
<thead>
<tr>
<th>Description</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Salaries &amp; Wages</td>
<td>$148,219</td>
</tr>
<tr>
<td>2. Benefits ☞</td>
<td>$65,787</td>
</tr>
<tr>
<td>3. Travel ☞</td>
<td>$3,000</td>
</tr>
<tr>
<td>4. Training</td>
<td>$500</td>
</tr>
<tr>
<td>5. Contractual</td>
<td>$0</td>
</tr>
<tr>
<td>6. Supplies ☞</td>
<td>$43,364</td>
</tr>
<tr>
<td>7. Indirect Cost ☞</td>
<td>$39,130</td>
</tr>
<tr>
<td><strong>Total Amount</strong></td>
<td><strong>$300,000</strong></td>
</tr>
</tbody>
</table>

☞ Benefits include: Worker’s Compensation and other benefits appropriate for title (NOTE: Student Interns are non-personnel employees with no benefits and shall be excluded from the percentage calculation of this line item.). Also, although the composite benefit rates may appear to increase the cost for employee benefits (particularly in year 3), there are several contributing factors to higher rates, including increasing benefits costs as a whole and the restart of UC Retirement Program (UCRP) contributions. It should also be noted that the Composite Rate for year 3 Benefits is a projected rate and not an approved rate so it is subject to change.

☜ Travel includes: Invoice for payments on travel shall be based on current University of California rates and guidelines.

☜ Supplies include: Samplers (POCIS & SPMD), 18 sampling containers, field sampling supplies, lab supplies, reagents, this line item does not include any equipment with a unit acquisition cost of $5,000 or more. The remaining Samplers and 18 sampling containers procured under this Agreement shall be retained by DPR upon completion of the services.

☜ Indirect Cost: 10 - 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.
## EXHIBIT B
**Standard Agreement**

### Table II.a - Personnel Service Costs Fiscal Year 2011-2012

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Monthly Salary</th>
<th>Number of Months</th>
<th>Percentage Of Time</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>$13,976</td>
<td>0</td>
<td>50%</td>
<td>$0</td>
</tr>
<tr>
<td>Postdoctoral Researcher</td>
<td>$3,313</td>
<td>1</td>
<td>100%</td>
<td>$3,313</td>
</tr>
<tr>
<td><strong>Total Personnel</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$3,313</strong></td>
</tr>
<tr>
<td>Benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>$3075</td>
<td>0</td>
<td>50%</td>
<td>$0</td>
</tr>
<tr>
<td>Postdoctoral Researcher (40.2%)</td>
<td>$1,332</td>
<td>1</td>
<td>100%</td>
<td>$1,332</td>
</tr>
<tr>
<td><strong>Total Benefits</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$1,332</strong></td>
</tr>
<tr>
<td><strong>Total Personnel and Benefits</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$4,645</strong></td>
</tr>
</tbody>
</table>

### Table II.b - Personnel Service Costs Fiscal Year 2012-2013

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Monthly Salary</th>
<th>Number of Months</th>
<th>Percentage Of Time</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>$13,976</td>
<td>0</td>
<td>50%</td>
<td>$0</td>
</tr>
<tr>
<td>Postdoctoral Researcher</td>
<td>$3,313</td>
<td>12</td>
<td>100%</td>
<td>$39,756</td>
</tr>
<tr>
<td>Junior Specialist</td>
<td>$2,890</td>
<td>5</td>
<td>100%</td>
<td>$14,450</td>
</tr>
<tr>
<td><strong>Total Personnel</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$54,206</strong></td>
</tr>
<tr>
<td>Benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>$3075</td>
<td>0</td>
<td>50%</td>
<td>$0</td>
</tr>
<tr>
<td>Postdoctoral Researcher (44.2%)</td>
<td>$1,464</td>
<td>12</td>
<td>100%</td>
<td>$17,572</td>
</tr>
<tr>
<td>Junior Specialist (30.3%)</td>
<td>$876</td>
<td>5</td>
<td>100%</td>
<td>$4,380</td>
</tr>
<tr>
<td><strong>Total Benefits</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$21,952</strong></td>
</tr>
<tr>
<td><strong>Total Personnel and Benefits</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$76,158</strong></td>
</tr>
</tbody>
</table>

### Table II.c - Personnel Service Costs Fiscal Year 2013-2014

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Monthly Salary</th>
<th>Number of Months</th>
<th>Percentage Of Time</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>$13,976</td>
<td>1</td>
<td>50%</td>
<td>$6,988</td>
</tr>
<tr>
<td>Postdoctoral Researcher</td>
<td>$3,488</td>
<td>12</td>
<td>100%</td>
<td>$41,856</td>
</tr>
<tr>
<td>Postdoctoral Researcher</td>
<td>$3,488</td>
<td>12</td>
<td>100%</td>
<td>$41,856</td>
</tr>
<tr>
<td><strong>Total Personnel</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$90,700</strong></td>
</tr>
<tr>
<td>Benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal Investigator (33.3%)</td>
<td>$3,075</td>
<td>1</td>
<td>50%</td>
<td>$2,327</td>
</tr>
<tr>
<td>Postdoctoral Researcher (48%)</td>
<td>$1,674</td>
<td>12</td>
<td>100%</td>
<td>$20,088</td>
</tr>
<tr>
<td>Postdoctoral Researcher (48%)</td>
<td>$1,674</td>
<td>12</td>
<td>100%</td>
<td>$20,088</td>
</tr>
<tr>
<td><strong>Total Benefits</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$42,503</strong></td>
</tr>
<tr>
<td><strong>Total Personnel and Benefits</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$133,203</strong></td>
</tr>
</tbody>
</table>
5. Cost Limitation

A. The total amount of this Agreement shall not exceed $300,000.00.

B. It is understood and agreed that this total is an estimate and that DPR will pay for only those services actually rendered as authorized by the DPR Contract Manager or his/her designee.
EXHIBIT D
Standard Agreement

SPECIAL TERMS AND CONDITIONS

1. Termination
   A. Either Party reserves the right to terminate this agreement without cause upon thirty (30) days written notice to the other Party, or immediately in the event of a material breach. In the event of termination, Contractor shall be paid for all allowable costs incurred up to the date of termination, including any non-cancelable obligations.
   B. In the event that the total Agreement amount is expended prior to the expiration date, DPR may, at its sole discretion, terminate this Agreement with 30 days notice to contractor.

2. Subcontracting
   Contractor shall perform the work contemplated with resources available within its own organization and no portion of the work shall be subcontracted.

3. Dispute Resolution
   A. DPR reserves the right to issue an order to stop work in the event that a dispute should arise, or in the event that the DPR gives the performing agency a notice that this Agreement will be terminated. If DPR exercises this right, the stop-work order will be in effect until the dispute has been resolved or this Agreement has been terminated.
   B. Any dispute concerning a question of fact arising under the terms of this Agreement which is not disposed of within a reasonable period of time by agency employees normally responsible for the administration of this agreement, shall be brought to the attention of the Executive Officer or designated representative of each agency for joint resolution.
   C. The Contractor shall continue to perform all its responsibilities under this agreement during any dispute until notified to stop work or expiration of this Agreement.

4. Harassment Free Workplace
   The Department of Pesticide Regulation (DPR) is committed to providing a safe, secure environment, free from sexual misconduct. It is policy of the Department that employees have the right to work in an environment that is free from all forms of discrimination, including sexual harassment. This policy specifically speaks to freedom from a sexually harassing act that results in the creation of an intimidating, hostile or offensive work environment or that otherwise interferes with an individual’s employment or work performance. As a Contractor with DPR, you and your staff are expected to comply with a standard of conduct that is respectful and courteous to DPR employees and all other persons contacted during the performance of this Agreement. Sexual harassment is unacceptable, will not be tolerated; and may be cause for prohibiting some or all of the Contractor’s staff from performing work under this Agreement.
EXHIBIT E
Standard Agreement

1. Contractor Evaluation

The Contractor is hereby notified that its performance under this Agreement may be evaluated within thirty (30) calendar days following the Expiration of this Agreement. The evaluation may include statements on the adequacy of the service or the product, whether the service was satisfactory, whether the service or the product was provided or completed within the time limitations, reasons for time or cost overruns, whether the product is operational or being utilized by the State, and/or the State plans for implementation, and the State’s general impression as to the competency of the Contractor and its staff. The evaluation shall be filed in the State’s official Contractor Evaluation File.

2. Consulting Services

A. The Contractor is hereby advised of its duties, obligations and rights under Public Contract Code § 10335.5.

B. The Contractor’s key personnel assigned to perform work under this Agreement and their level of responsibility shall be mutually acceptable to the State and the Contractor.
EXHIBIT F
Standard Agreement

Ronald Scott Tjeerdema

Professional Preparation
Humboldt State University, Arcata, CA  Wildlife Management  BS 1980
Humboldt State University, Arcata, CA  Natural Resource Planning & Interpretation  BS 1980
University of California, Santa Barbara  Pharmacology & Toxicology  MA 1983
University of California, Davis  Pharmacology & Toxicology  PhD 1987

Appointments
2003–present  Chair, Department of Environmental Toxicology, UC Davis
1999–present  Professor, Department of Environmental Toxicology, UC Davis
1999–present  Environmental Chemist, Agricultural Experiment Station, UC Davis
1998–99  Professor, Department of Chemistry & Biochemistry, UC Santa Cruz
1994–98  Associate Professor, Department of Chemistry & Biochemistry, UC Santa Cruz
1992–94  Assistant Professor, Department of Chemistry & Biochemistry, UC Santa Cruz
1987–92  ASSISTANT RESEARCH TOXICOLOGIST (RES. FACULTY), INSTITUTE OF MARINE SCIENCES, UC SANTA CRUZ

Professional Certification
1994–present  Diplomate in General Toxicology, American Board of Toxicology (DABT)

Peer-Reviewed Publications
EXHIBIT F

Standard Agreement


EXHIBIT F
Standard Agreement


EXHIBIT F
Standard Agreement


EXHIBIT F
Standard Agreement


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Standard Agreement


EXHIBIT F

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Standard Agreement


