STATE OF CALIFORNIA
STANDARD AGREEMENT
STD 213 (Rev 06/03)

AGREEMENT NUMBER
13-C0062
REGISTRATION NUMBER
1344749

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

STATE AGENCY'S NAME
Department of Pesticide Regulation

CONTRACTOR'S NAME
The Regents of the University of California, on Behalf of Its Riverside Campus

2. The term of this Agreement is: April 15, 2014 or upon final approval by the State, whichever occurs later, through June 30, 2016

3. The maximum amount of this Agreement is: **$179,306.00**
One hundred seventy-nine thousand three hundred six 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	5 Pages
Exhibit B – Budget Detail and Payment Provisions	4 Pages
Exhibit C* – General Terms and Conditions (GIA 610)	
Exhibit D – Special Terms and Conditions	1 Page
Exhibit E – Additional Terms and Conditions	2 Page
Exhibit F – Curriculum Vitae	13 Pages
Attachment 1 – Federal Agreement	14 Pages

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.ols.dgs.ca.gov/Standard+Language/default.htm

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

CONTRACTOR

CONTRACTOR'S NAME *(if other than an individual, state whether a corporation, partnership, etc.)*
The Regents of the University of California, on Behalf of Its Riverside Campus

BY *(Authorized Signature)* F. Al Zgoul
DATE SIGNED *(Do not type)* 3/27/2014

PRINTED NAME AND TITLE OF PERSON SIGNING Frosina Al Zgoul
Sr. Contract & Grant Officer

ADDRESS
Research and Economic Development
200 University Office Blvd., ~~University of California, SPA~~, Riverside, CA 92521-0217

STATE OF CALIFORNIA

AGENCY NAME
Department of Pesticide Regulation

BY *(Authorized Signature)*
DATE SIGNED *(Do not type)* 4/7/14

PRINTED NAME AND TITLE OF PERSON SIGNING
Lu Saephanh, Chief, Fiscal Services and Business Operations Branch

ADDRESS
1001 I Street, Sacramento, CA 95814

California Department of General Services Use Only

APPROVED
APR 11 2014
DEPT OF GENERAL SERVICES

☐ Exempt per:

EXHIBIT A
STANDARD AGREEMENT

SCOPE OF WORK

1. This Agreement is entered into by and between the Department of Pesticide Regulation (DPR) and the Regents of the University of California, UC Riverside (UCR or Contractor), Office of Research, 200 University Office Bldg., Riverside, CA 92521-0217.

2. The Contractor will perform research in "Development of Passive Samplers for Ambient Monitoring of Pesticides in Water."

3. This Agreement will commence on the start date of April 15, 2014 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, 2016. The services shall be provided during normal working hours, Monday through Friday, except State holidays.

4. 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 **April DaSilva,** at:

   Department of Pesticide Regulation
   Environmental Monitoring Branch
   1001 I Street
   P.O. Box 4015
   Sacramento, CA 95812-4015
   Phone (916) 445-0113; Fax (916) 445-4405
   Email address: april.dasilva@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 technical communications from DPR to the Contractor shall be directed to the attention of **Prof. Jay Gan** at:

   Prof. Jay Gan
   Professor of Environmental Science
   Department of Environmental Sciences
   UC Riverside, CA 92521

   Phone: (951) 827-2712; Fax: (951) 827-3991
   Email: jgan@ucr.edu

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D. All fiscal communications from DPR to Contractor shall be directed to the attention of **Fred Devera** at:

Fred Devera, Extramural Funds Supervisor
Regents of the University of California,
Riverside Accounting Office
UC Riverside, CA 92521

Phone: (951) 827-1948; FAX: (951) 827-3314
Email Address: fred.devera@ucr.edu

E. 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.

5. Background and Goals

Pesticides such as pyrethroids and fipronil (and its metabolites) are frequently found in urban surface waters as a result of insecticide use for preventive and eradicative pest control around homes. Monitoring of occurrence, levels, patterns and trends of pesticides in receiving water bodies is essential for water quality protection and mitigation. Monitoring of water-column contaminants has traditionally relied on spot or grab sampling which provides data specific only to the location or time being sampled and may not reflect the contamination of a stream at all. In addition, flow velocity for a stream varies as a function of time and space, and the variation is particularly pronounced during and after a rain event. Therefore, sampling methods allowing the acquirement of integrative concentration information are useful and should be explored.

Passive samplers are novel tools for monitoring surface water contaminants. Such samplers usually employ a sorbent material allowing the partition of target contaminants from the water column to the sorbent phase. Analysis of the sorbent upon sampler retrieval would theoretically provide integrative or averaged concentration in the water column. In addition, sorbent-based samplers selectively sample the freely dissolved concentration (i.e., bioavailable fraction) which is most relevant for prediction of aquatic toxicological effects. Many sorbent-based passive samplers have been proposed and tested, which include thin-film samplers and solid phase microextraction (SPME). For field applications, thin-film samplers are considered to be more suitable due to their durability, flexibility, and relatively large sorbent volumes. Thin-film samplers may vary in the type of sorbent used as well as configurations. Based on studies on various organic contaminants, polyethylene (PE) film is generally well suited for hydrophobic compounds with high Kow, while other types of sorbents, such as polyacrylate-coated film or polyvinyl film, may be more compatible with moderately hydrophobic compounds.

Although many studies have been reported on passive samplers, most applications are on persistent organic pollutants such as PAHs, PCBs, and PBDEs, and relatively few studies have considered pesticides such as pyrethroids and fipronil that are common urban-use insecticides with water quality concerns. In addition, most applications have been carried out under equilibrium conditions, which do not consider the influence of flow variations. In recent studies, researchers showed that preloading of a sampler with performance reference compounds (PRCs) may allow sampling to be undertaken under non-equilibrium conditions, and also the correction or calibration of flow velocity influences. PRCs may be stable isotope labeled analogs of the target contaminants, or non-labeled compounds similar in physico-chemical

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properties to the target analytes (when stable-isotope labeled analogs are not available). PRC calibration removes the requirement for attaining equilibrium or steady state, which may takes many weeks for compounds such as bifenthrin, making the sampler deployment time flexible.

The overall objectives of this study are to 1) identify the best film types for monitoring pyrethroids and fipronil (and its metabolites) in freshwater, 2) obtain reliable sampler-water partition coefficients, 3) develop PRC loading methods and test performance of PRC calibration for the selected film samplers, 4) validate, under lab-simulated and field conditions, the performance of passive samplers for measurement of pyrethroids and fipronil products in water column under different conditions, and 5) develop a written protocol for the assembly, deployment, retrieval and analysis of film samplers.

6. Work to Be Performed

Task 1. Identifying films best suited for pyrethroids and fipronil monitoring

- In this task, Contractor will first consult published literature to select 4-6 types of thin films for testing. The candidates include low density polyethylene (LDPE), polyvinyl film, polyoxymethylene film, polyacrylate coated film, and polydimethylsiloxane coated film. It is likely that some hybrid (sandwiched) film may work for both pyrethroids and fipronil (and its metabolites) and should be included.
- Tests will include uptake and elimination of pyrethroids and fipronil (and metabolites) from clean water to the film under laboratory conditions, and measurement of $K_{sampler\text{-}water}$ partition coefficient. Selection of film types will depend on the uptake rate and reproducibility, with the purpose to achieve maximum $K_{sampler\text{-}water}$ for the target pesticides.
- Other factors, such as availability, durability, flexibility, and biofouling potential, will also be considered in the selection.
- The deliverables for Task 1 are one or two types of film that may be fabricated into samplers appropriate for field use to monitor pyrethroids and fipronil products in water with sufficient sensitivity and reproducibility. It is likely that two different types of film may be necessary – one for pyrethroids and one for fipronil (and metabolites). This will increase the number of samples to be analyzed, but should not present a big issue for field deployment as both film samplers could be held in one device at the same location. The use of different films for pyrethroids and fipronil may be important for achieving optimal detection limits.

Task 2. PRC loading and performance evaluation studies

- In this task, Contractor will identify PRCs appropriate for the target pyrethroids and fipronil (and metabolites). Stable isotope-labeled compounds (e.g., deuterated analogues) are available for some pyrethroids. For fipronil and metabolites, it will be necessary to find a compound that is not detectable in the environment but has similar structure or physico-chemical properties.
- PRC loading may be done by equilibrating the film in a solvent containing a mixture of PRCs. Experiments will be carried out to optimize the conditions, including the type of solvent, the ratio of solvent-water (if water is also used), and the contact duration to achieve reproducible and uniform loadings.

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- The performance of PRC-loaded samplers will be evaluated under different conditions, including static conditions, mixing at different speeds, and water with suspended solids and dissolved organic matter. Uptake of pyrethroids and fipronil (and metabolites) onto the film and elimination of PRCs from the film will be simultaneously measured. The uptake rate constant (K_a) and the elimination rate constant (K_e) should be identical and this assumption will be validated.

- These studies will also provide specific details on methods to extract and analyze pyrethroids and fipronil (and metabolites) and their PRCs from the film samples, time ranges for film exposure, and influences of various conditions (static vs. mixing, suspended solids, DOM).

- The deliverables for Task 2 are PRC loading methods, procedures for film extraction and instrumental analysis, and film exposure time ranges.

Task 3. Laboratory and field application testing

- In this task, the selected films will be fabricated into configurations suitable for field application. Literature will be consulted in determining the best configurations. Device for holding the film in place will be constructed. Factors such as portability, rigorousness, and compatibility with different flow or water depth conditions, will be taken into consideration when deciding on the optimal configuration.

- The sampler performance will be first tested under laboratory simulated conditions. Contractor will use glass aquaria or galvanized metal troughs to spike known levels of pesticides into water, use a pump to circulate the water at different velocities, and deploy the sampler for sampling. Water samples will be taken periodically from the system, and results will be compared to the levels detected by the sampler.

- The sampler performance will be further tested under field conditions, such as at points of urban runoff outfalls in Orange County, in LA River, San Gabriel River, and San Diego Creek. Multiple samplers (preloaded with PRCs) will be deployed for a pre-determined time interval, and will be retrieved for analysis. Water samples will be collected from the same sites and analyzed. Levels found from the grab samples will be compared to those found on samplers, and statistics such as *t*-test (or ANOVA where applicable) will be used to determine if the passive sampling method produces comparable results as the grab-sampling method.

- The deliverable for Task 3 is a report containing information on the performance of passive samplers for field application, and specific details for ensuring reproducible sampling with detection limits suitable for ambient monitoring.

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Task 4. Passive sampler user guide

- In this task, Contractor will develop written standard operation procedures (SOPs) that may be followed by general users for preparing PRC-preloaded films, assembling passive samplers, deployment and retrieval of samplers, and analysis of samplers for pyrethroids and fipronil (and metabolites).
- The deliverables for Task 4 are written SOPs for:
  - Preparing PRC-preloaded films;
  - Assembling passive samplers;
  - Deployment and retrieval of samplers; and,
  - Analysis of samplers for pyrethroids and fipronil and their metabolites

7. PROJECT TIMELINE

	2013-14	2014-15				2015-16			
Tasks	Spring	Summer	Fall	Winter	Spring	Summer	Fall	Winter	Spring
Task 1	X	X	X						
Task 2			X	X	X				
Task 3					X	X	X	X	X
Task 4								X	X

8. DPR Responsibility

A. Provide review and approval of study protocol and report within 30 days of submission.

B. Provide prompt payment of invoices as detailed in Exhibit B of this Agreement.

EXHIBIT B
Standard Agreement

BUDGET DETAIL AND PAYMENT PROVISIONS

1. Invoicing

A. For services performed according to the attached Scope of Work and the terms of this Agreement, and upon receipt of the invoices, 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 will be itemized in accordance with the Rates found in this Exhibit, and will include the Agreement Number, and will be submitted in triplicate not more frequently than monthly or less than 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.

EXHIBIT B
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D. Contractor will be reimbursed for direct costs, other than salary costs, that are identified in the Contractor's rates.

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 amount shall be withheld by DPR until completion of the services performed according to the scope of work and the terms of this agreement.

4. Rates

Table I. Expenditures by Budget Line Item

Budget Line Item	13-14	14-15	15-16
1. Salaries & Wages	$9,190	$37,493	$38,242
2. Direct Benefits	$4,595	$18,747	$19,121
3. Travel (in state) ①	$250	$1,000	$1,000
4. Supplies ②	$1,410	$6,760	$5,637
4. Indirect Cost③	$3,861	$16,000	$16,000
Subtotal	**$19,306**	**$80,000**	**$80,000**
		Agreement Total	**$179,306**

① Travel – To and from study sites in Orange County.
② Supplies – Includes materials used for constructing test systems, passive samplers, purchase of glassware, chemicals and other consumables used for experiments, and sample preparation and analysis.
③ Indirect Cost– at 25% of TDC, includes department and general administration, sponsored projects administration, building and equipment depreciation, building interest, operations and maintenance, library, and student services administration.

EXHIBIT B
Standard Agreement

Table II. Detail of Salaries, Wages, and Benefits

Classification	Monthly Salary	Number of Months	Percentage of Time ①	Total
Assistant Specialist (FY 13-14)	$3,562	3	86%	$9,190
Assistant Specialist (FY 14-15)	$3,633	12	86%	$37,493
Assistant Specialist (FY 15-16) Represents a 2.0% pay increase	$3,706	12	86%	$38,242
Total Personnel		24	86%	$84,925
Direct Benefits:				
Assistant Specialist @ 50%	**(FY13-14)**			$4,595
Assistant Specialist @ 50%	**(FY14-15)**			$18,747
Assistant Specialist @ 50%	**(FY15-16)**			$19,121
			Total Benefits	$42,463
			Total Personnel and Benefits	$127,388

5. Cost Limitation

A. The total amount of this Agreement shall not exceed $179,306.00.

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.

6. Agreements Funded in Whole or in Part by the Federal Government

A. The Contractor shall comply with both the State's provisions and all applicable federal government provisions. In the event that the State's provisions are in conflict with the federal government's provisions, the federal government's provisions shall be controlling.

B. It is mutually understood between the parties that this contract may have been written for the mutual benefit of both parties before ascertaining the availability of congressional appropriation of funds, to avoid program and fiscal delays that would occur if the contract were executed after that determination was made.

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C. This Agreement is valid and enforceable only if sufficient funds are made available to the State by the United States Government for the current Fiscal Year(s) 2013 through2014 and/or any subsequent years covered under this Agreement for the purposes of this project. In addition, this Agreement is subject to any additional restrictions, limitations, or conditions enacted by the Congress or any statute enacted by the Congress which may affect the provisions, terms or funding of this Agreement in any manner.

D. The parties mutually agree that if the Congress does not appropriate sufficient funds for the program/project, this contract shall be amended to reflect any reduction in funds.

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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 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.

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Standard Agreement

ADDITIONAL PROVISIONS

1. Disposition of Work Product

DPR retains use and non-commercial governmental distribution rights to all deliverables identified in Exhibit A of this Agreement.

2. Lead Free Products

The Contractor is hereby notified that all products offered or provided to the State as a result of this Agreement will be lead free.

3. Equipment Purchases

Except as provided in Exhibit B, the Contractor shall not use state funds allocated under the agreement to purchase equipment. As used in this paragraph, "equipment" means an article of nonexpendable, tangible personal property, including furniture, having a useful life of at least one (1) year and a unit acquisition cost of at least five thousand dollars ($5,000).

4. Contractor Evaluation

The Contractor is hereby notified that its performance under this Agreement shall 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.

5. 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 E
Standard Agreement

6. Federal Agreement

A. This Agreement is resulting from funding under Federal Assistance Agreement No. 00T11414 with the U.S. Government. The Federal Assistance Agreement is attached to this contract Agreement as Attachment 1.

B. Standard Federal regulations specified and listed as part of Attachment 1, including CFRs, and OMB circulars, are not attached hereto, but are expressly incorporated by reference.

C. The Contractor understands that the State is obligated; in accordance with its Federal Assistance Agreement with the U.S. Government to comply with the provisions of federal regulations contained in Title 40 CFR and any conditions in the agreement and any amendments thereto. In order to ensure the State can meet these obligations the Contractor agrees to all general and special conditions contained in the Assistance Agreement.

D. In addition the Contractor agrees that affirmative steps will be taken to assure that qualified small, minority, and women's businesses (MBE/WBE) are used, when possible, as sources of supplies, equipment and subcontracting services, if applicable, under this Agreement.

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Jay J. Gan

Professor of Environmental Chemistry
Department of Environmental Sciences, UC Riverside, CA 92521
Phone: (951) 827-2712; Fax: (951) 827-3993; email: jgan@ ucr.edu

I. Professional and Education Background

7.2010 – now	Professor VI (senior professor), Dept. Environmental Sciences, Univ. California, Riverside
7.2004 – 6.2010	Professor of Environmental Chemistry, Dept. Environmental Sciences, Univ. California, Riverside
10.2007-7.2010	Department Chair, Dept. Environmental Sciences, Univ. California, Riverside
7.2003-6.2004	Associate Professor & Water Quality Specialist, Dept. Environmental Sciences, Univ. California, Riverside
7.2001-6.2003	Assistant Professor & Water Quality Specialist, Dept. Environmental Sciences, Univ. California, Riverside
7.1999-7.2001	Associate Researcher, USDA-ARS US Salinity Laboratory and Dept. Environmental Sciences, Univ. California, Riverside
5.1995-7.1999	Assistant Researcher, USDA-ARS US Salinity Laboratory and Dept. Environmental Sciences, Univ. California, Riverside
3.1993-5.1995	Postdoctoral Researcher, USDA-ARS US Salinity Laboratory and Dept. Environmental Sciences, Univ. California, Riverside
8.1991-3.1993	Postdoctoral Researcher, Dept. Soil, Air and Climate, Univ. Minnesota, St. Paul, MN
2.1990-8.1991	Visiting Fellow, Agrochemicals Unit, Agricultural Research Laboratory, the International Atomic Energy Agency (UN), Seibersdorf, Austria
9.1982-7.1988	Ph.D., Environmental Chemistry, Zhejiang University, Hangzhou, China

II. Expertise and Interests

- Environmental fate, transport and risk assessment of organic contaminants including pesticides, POPs, PBDEs, and PPCPs/EDCs
- Biotic and abiotic transformations, phase partition, leaching, runoff, aquatic bioaccumulation, and plant uptake
- Environmental analytical chemistry
- Bioavailability in sediments and soils, biomimetic analysis, and ecotoxicology
- Chiral chemistry and chiral selectivity
- Wastewater reuse and fate/risks of PPCPs/EDCs
- Mitigation strategies and risk-reduction practices (e.g., wetlands, vegetative buffers, non-point pollution)

III. Teaching

- Introduction to Environmental Science (Lower Division, about 280 students each offering)
- Fate and transport of contaminants in soil (Upper Division, Undergraduate Level)
- Environmental Organic Chemistry (Graduate Level)
- Fate and Transport of Chemicals (Graduate Level)
- Graduate programs: Environmental Sciences; Environmental Toxicology

IV. Professional Honors and Service

Honors:

- Fellow, AAAS (American Association for Advancement of Science), 2008
- Fellow, Soil Science Society of America (SSSA), 2010
- Fellow, ASA (American Society of Agronomy), 2005

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Editorial Service:

- Associate Editor, *Environmental Pollution*, 01/2013 – now.
- Associate Editor, *Journal of Environmental Quality*, 01/2000 to 12/2006.
- Editorial Board, J. Agricultural and Chemistry, 1/2012 – now.
- Editorial Board, *Environmental Toxicology and Chemistry*, 2006 – 2009.
- Subject Editor (Ecotoxicology of soils), *Journal of Soils and Sediments*, 2011-now.
- Subject Editor (Sediment quality and impact assessment), *Journal of Soils and Sediments*, 2011-now.

Professional Offices and Panels:

- Chair, Division S-11 "Soil and Environmental Quality", SSSA, 2011
- Executive Committee, Agrochemicals Division, American Chemical Society, 2006-now.
- Vice Chair, Programming Committee, 13th IUPAC International Congress of Pesticide Chemistry, San Francisco, CA,
- Review panel, USDA-National Research Initiative (NRI) Competitive Grants Program, Watershed and Water Processes Program, April 26-30, 2004, Washington, D.C.
- EPA FIFRA Scientific Advisory Panel on "Selected Issues Associated with the Risk Assessment Process for Pesticides with Persistent, Bioaccumulative, and Toxic Characteristics", October 28-31, 2008, Washington, D.C.
- Review Panel, EPA Science to Achieve Results (STAR) Fellowship Grant Program, 2011
- Review Panel, Chinese National Science Foundation, Division of Environmental Chemistry, 2010-2013
- Science Advisory Committee, Aquatic Pesticide Monitoring Program, San Francisco Estuary Institute and State Water Resources Control Board. 2002 to 2005.
- Panel member, NWRI Independent Advisory Panel for LADWP's Groundwater Replenishment Project, 2011.
- Technical Advisory Committee, Organochlorine Compounds TMDLs, Santa Ana Regional Water Quality Control Board, 2005, 2006.
- Technical Advisory Committee, Santa Clara River water quality improvement project, 2006-08
- Technical Advisory Committee, SWRCB project on pesticide runoff mitigation, 2006-08
- Advisory Board, Southern California Society of Environmental Toxicology and Chemistry (SoCal-SETAC), 6. 2003-2005.
- Soil Research Award Committee, Soil Science Society of America, 2005, 2006
- Environmental Quality Research Award Committee, ASA, 2007, 2008; 2009 (chair)
- International Soil Science Award Committee, SSSA, 2006-2008 (member); 2009 (chair)
- America-New Zealand Soil Science Professional Exchange Fund Committee, 2007-2009.
- Cal EPA Review Advisory Committee, Berkeley Institute of the Environment (Expert on Pesticides), 2007, 2008
- Program Committee, 4th Pan-Pacific Conference on Pesticide Science, Hawaii, 2008.
- Strategic Planning Committee, Agrochemicals Division, American Chemical Society, 1/2011-now.
- Co-Chair, International Activity Committee, Agrochemicals Division, American Chemical Society, 1/2011-now.
- Western Regional Committee (W-82) on "Pesticides and Other Toxic Organics in Soil and Their Potential for Groundwater Contamination", 1998-present.
- Western Regional Committee (W-45) on "Environmental Transformation, Exposure, and Effects of Pesticide Residues", 1998-present; 2008-09 (secretary); 2010-11 (chair)

Meeting Organization & Chairing Activities (from 2005):

- Organizer and chair, Plenary session "New Frontiers in Environmental Chemistry", Southern California SETAC Annual Conference, Loyola Marymount University, Los Angeles, CA, May 20-21, 2005.
- Symposium Chair, "Synthetic Pyrethroids: Fate and Effects", 232nd American Chemical Society Meetings, San Francisco, CA, September 10-14, 2006.
- Symposium co-Chair, "Modern Chiral Agrochemicals", 234th American Chemical Society (ACS) Meetings, Boston, MA, August 19-23, 2007.

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- Symposium Chair, "Environmental Fate and Effects", 4th Pan Pacific Conference on Pesticide Science, Honolulu, HI, June 1-5, 2008.
- Symposium Chair, "Bioavailability of Hydrophobic Contaminants in Soil and Sediment", 5th Society of Environmental Toxicology and Chemistry (SETAC) World Congress, Sydney, Australia, August 3-7, 2008.
- Session co-Chair, "Emissions of Atmospheric Pollutants and Carbon Sequestration", 2008 Joint Meeting of The Geological Society of America, Soil Science Society of America, American Society of Agronomy, Crop Science Society of America, Gulf Coast Association of Geological Societies with the Gulf Coast Section of SEPM, October 5-9, 2008, Houston, TX.
- Host and organizer, W-1082 Western Regional Project Meeting, January 8-9, 2009, U.S. Salinity Laboratory, Riverside, CA.
- Session Chair, "Developing Best Management Practices and Analytical Methods for Pesticides", ASA-CSSA-SSSA Annual Meeting, Pittsburgh, PA, November 1-5, 2009.
- Symposium Organizer and Chair, Special symposium "Pesticides and Urban Water Quality: Monitoring, Modeling and Mitigation", 239th American Chemical Society National Meeting, San Francisco, CA, March 20-25, 2010.
- Symposium Co-organizer, "Third Agrochemical Symposium on Modern Chiral Pesticides: Enantioselectivity and Its Consequences", 239th American Chemical Society National Meeting, San Francisco, CA, March 20-25, 2010.
- Session Chair, Session XXII "Life-Cycle-Recycle", 5th Annual International Symposium on Environment, Athens, Greece, May 20-23, 2010.
- Chair – USDA Multi-state Project W-2045 Annual Committee Meeting, Lake Tahoe, NV, June 5-7, 2011.
- Symposium Organizer and Chair – Special symposium "From Sorption to Bioavailability", ASA/CSSA/SSSA 2011 International Annual Meetings, October 16-19, 2011, San Antonio, TX.
- Session Co-Chair, "Pesticides in Urban Aquatic Environments: Occurrence, Effects and Mitigation Options:, SETAC-North America Annual Meeting, November 11-15, 2012, Long Beach, CA
- Session Co-Chair, "Assessing Potential Ecological and Human Health Effects from Fertilizer and Pesticide Use in Urban Environments", 214th American Chemical Society (ACS) Annual Meeting, September 8-12, 2013, Indianapolis, IN.

V. Technical Presentations (since 2004)

Invited talks:

75 total, including international, national and regional meetings

Contributed presentations:

165 total, including oral and poster presentations at international, national and regional meetings.

VI. Selected Publications

Edited Books (4 total)

1). Gan, J., P. Zhu, S.D. Aust, and A.T. Lemley. *Pesticide Decontamination and Detoxification.* American Chemical Society Symposium Series 863, ACS, Washington, DC, 2003. 266p.

2). Gan, J., F. Spurlock, P. Hendley, and D. Weston. *Synthetic Pyrethroids: Occurrence and Effects in Aquatic Environments.* American Chemical Society Symposium Series 991, ACS, Washington, DC, 2008. 450 pp.

3). Goh, K., B. Bret, T. Potter, and J. Gan. 2011. *Pesticide Mitigation Strategies for Surface Water Quality.* American Chemical Society Symposium Series 1075, American Chemical Society: Washington, D.C. ISBN13 978-0-8412-2658-6.

4). Garrison, A.W., J. Gan, and W.P. Liu. 2012. Chiral Pesticides: Stereoselectivity and its Consequences. American Chemical Society Symposium Series 1085, American Chemical Society: Washington, D.C. ISBN13 978-0-8412-2679-1.

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Journal Publications:

Summary of citations (Web of Knowledge, as of December 18, 2013):
Total citations = 4500 (citations without self-citations = 4510); H Index = 38

208. Dodgen, L., D. Parker, and J. Gan. 2013. Uptake and accumulation of four PPCP/EDCs in two leafy vegetables. *Environmental Pollution* 182: 150-156.
207. Li, J.Y., Q.F. Ye, and J. Gan. 2014. Degradation and transformation products of acetaminophen in soil. *Water Research* 49: 44-52.
206. Wu, X.Q., F. Ernst, and J. Gan. 2013. Comparative uptake and translocation of pharmaceutical and personal care products (PPCPs) by common vegetables. *Environmental International* 60: 15-22.
205. Riar, N., J. Crago, W.Y. Jiang, L.A. Maryoung, J. Gan, and D. Schlenk. 2013. Effects of salinity acclimation on the endocrine disruption and acute toxicity of bifenthrin in freshwater and euryhaline strains of *Oncorhynchus mykiss*. *Environmental Toxicology & Chemistry* 32: 2779-2785.
204. Jia, F., and J. Gan. 2014. Comparing black carbon types in sequestering polybrominated diphenyl ethers (PBDEs) in sediments. *Environmental Pollution* 184: 131-137.
203. Cui, X.Y., and J. Gan. 2013. Solid-phase microextraction (SPME) with stable isotope calibration for measuring bioavailability of hydrophobic organic contaminants. *Environmental Science & Technology* 47: 9833-9840.
202. Rojas, R., J. Morillo, J. Usero, L. Delgado-Moreno, and J. Gan. 2013. Enhancing soil sorption capacity of an agricultural soil by addition of three different organic wastes. *Science of the Total Environment* 458-460: 614-623.
201. Lu, Z.J., and J. Gan. 2013. Oxidation of nonylphenol and octylphenol by manganese dioxide: Kinetics and pathways. *Environmental Pollution* 180: 214-220.
200. Bao, L.J., JF. Jia, J.Crago, E.Y. Zeng, D. Schlenk, and J. Gan. 2013. Assessing bioavailability of DDT and metabolites in marine sediments using solid phase microextraction with performance reference compounds. *Environmental Toxicology & Chemistry* 32: 1946-1953.199.
199. Anderson, M., J. Conkle, P. Pacheco, and J. Gan. 2013. Delineation of organochlorine pesticide and PCB contamination in lake sediment by coupling hydroacoustic measurements with chemical analysis. *Science of the Total Environment* 458-460: 117-124.198.
198. Luo, Y.Z., F. Spurlock, W.Y. Jiang, B.C. Jorgenson, T. Young, J. Gan, S. Gill, and K.S. Goh. 2013. Pesticide washoff from concrete surfaces: literature review and a new modeling approach. *Water Research* 47: 3163-3172.
197. Jiang, W.Y., A. Soeprono, M. Rust, and J. Gan. 2013. Ant control efficacy of pyrethroids and fipronil on outdoor concrete surfaces. *Pest Management Science* DOI 10.1002/ps.3555
196. Li, J.Y., L. Dodgen, Q.F. Ye, and J. Gan. 2013. Degradation kinetics and metabolites of carbamazepine in soil. *Environmental Science & Technology* 47: 3678-3684.
195. Cui, X.Y., and J. Gan. 2013. Comparing sorption behavior of pyrethroids between formulated and natural sediments. *Environmental Toxicology & Chemistry* 32: 1033-1039.194. Delgado-Moreno, L., and J. Gan. 2013. A stable isotope dilution method for measuring bioavailability of organic contaminants. *Environmental Pollution* 176: 171-177.
193. Cui, X.Y., P. Mayer, and J. Gan. 2013. Methods to assess bioavailability of hydrophobic organic contaminants: Principles, operations, and limitations. *Environmental Pollution* 172: 223-234.
192. Lin, K.D., J.F. Ding, H.Y. Wang, X.W. Huang, and J. Gan. 2012. Geothite-mediated transformation of bisphenol A. *Chemosphere* 89:789-795.
191. Wang, W., L. Delgado-Moreno, J. Conkle, M. Anderson, C. Amrhein, Q.F. Ye, and J. Gan. 2012. Characterization of sediment contamination patterns by hydrophobic pesticides to preserve ecosystem functions of drainage lakes. *Journal of Soils and Sediments* 12:1407-1418.
190. Wright, L., D.A. Devitt, M.H. Young, J. Gan, B.J. Vanderford, S.A. Snyder, M. McCullough, and L. Dodgen. 2012. Fate and transport of 13 pharmaceutical and personal care products in a controlled and irrigated turfgrass system. *Agronomy Journal* 104: 1244-1254.
189. Wu, X.Q., J. Conkle, and J. Gan. 2012. Multi-residue determination of pharmaceutical and personal care products in vegetables. *Journal of Chromatography* A.1254: 78-86.
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182. Jiang, W.Y., D. Haver, M. Rust, and J. Gan. 2012. Runoff of pyrethroid insecticides from concrete surfaces following simulated and natural rainfalls. *Water Research* 46: 645-652.

181. Lin, K.D., S. Bondarenko, and J. Gan. 2011. Sorption and persistence of wastewater-borne psychoactive and antilipidemic drugs in soils. *Journal of Soils and Sediments* 11:1363–1372

180. Haruta, S., W.T. Jiao, W.P. Chen, A.C. Chang, and J. Gan. 2011. Evaluating Henry's law constant of N-nitrosodimethylamine (NDMA). *Water Science and Technology* 64: 1636-1641.

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177. Lu, Z.J., K.D. Lin, and J. Gan. 2011. Oxidation of bisphenol F (BPF) by manganese dioxide. *Environmental Pollution* 159: 2546-2551.

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164. Lao, W.J., and J. Gan. Characterization of warfarin unusual peak profiles on oligoproline chiral high performance liquid chromatography columns. *Journal of Chromatography A* 1217: 6545-6554.

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160. Wang, W., Q.F. Ye, W. Ding, A.L. Han, H.Y. Wang, L. Lu, and J. Gan. 2010. Influence of soil factors on the dissipation of a new pyrimidynyloxybenzoic herbicide ZJ0273. *Journal of Agricultural & Food Chemistry* 58: 3062-3067.

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157. Han, A.L., Y. Ling, Z. Li, H.Y. Wang, Y. Wang, Q.F. Ye, L. Lu, and J. Gan. Plant availability and phytotoxicity of soil bound residues of herbicide ZJ0273, a novel acetolactate synthase potential inhibitor. *Chemosphere* 77: 955-961.

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143. Cáceres-Jensen, L. J. Gan, M. Báez, R. Fuentes, and M. Escudey. 2009. Adsorption of glyphosate on variable-charge Chilean soils. *Journal of Environmental Quality* 38: 1449-1457.

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ATTACHMENT 1
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U.S. ENVIRONMENTAL PROTECTION AGENCY Cooperative Agreement	GRANT NUMBER (FAIN): 00T11414 MODIFICATION NUMBER: 0 PROGRAM CODE: BG	DATE OF AWARD 09/11/2013	
	TYPE OF ACTION New	MAILING DATE 09/18/2013	
	PAYMENT METHOD: ASAP	ACH# 90142	

RECIPIENT TYPE: State	Send Payment Request to: Las Vegas Finance Center, Fax (702) 798-2423
RECIPIENT:	PAYEE:
CA Dept of Pesticide Reg 1001 I Street Sacramento, CA 95812-4015 EIN: 68-0325102	CA Dept of Pesticide Reg 1001 I Street Sacramento, CA 95812-4015

PROJECT MANAGER	EPA PROJECT OFFICER	EPA GRANT SPECIALIST
Natalya Eagan 1001 I Street Sacramento, CA 95812-4015 E-Mail: neagan@cdpr.ca.gov Phone: 916-323-9303	Fabiola Estrada 75 Hawthorne Street, CED-5 San Francisco, CA 94105 E-Mail: estrada.fabiola@epa.gov Phone: 415-972-3493	Linda Struna Grants Management Office, MTS-7 E-Mail: Struna.Linda@epa.gov Phone: 415-972-3723

PROJECT TITLE AND DESCRIPTION
PERFORMANCE PARTNERSHIP GRANT
The purpose of this agreement is to support the California Department of Pesticide Regulation in ensuring that pesticides are manufactured, sold, used, and stored according to federal and state law. This agreement aims to improve the understanding and compliance with pesticide laws and regulations, protecting human health and the environment by implementing activities related to compliance, certification and training, and field program activities related to endangered species, water quality and worker safety.

This assistance agreement provides partial Federal funding in the amount of $1,373,863.

BUDGET PERIOD	PROJECT PERIOD	TOTAL BUDGET PERIOD COST	TOTAL PROJECT PERIOD COST
07/01/2013 - 06/30/2016	07/01/2013 - 06/30/2016	$5,262,404.00	$5,262,404.00

NOTICE OF AWARD

Based on your Application dated 04/11/2013 including all modifications and amendments, the United States acting by and through the US Environmental Protection Agency (EPA) hereby awards $1,373,863. EPA agrees to cost-share % of all approved budget period costs incurred, up to and not exceeding total federal funding of $1,373,863. Recipient's signature is not required on this agreement. The recipient demonstrates its commitment to carry out this award by either: 1) drawing down funds within 21 days after the EPA award or amendment mailing date; or 2) not filing a notice of disagreement with the award terms and conditions within 21 days after the EPA award or amendment mailing date. If the recipient disagrees with the terms and conditions specified in this award, the authorized representative of the recipient must furnish a notice of disagreement to the EPA Award Official within 21 days after the EPA award or amendment mailing date. In case of disagreement, and until the disagreement is resolved, the recipient should not draw down on the funds provided by this award/amendment, and any costs incurred by the recipient are at its own risk. This agreement is subject to applicable EPA statutory provisions. The applicable regulatory provisions are 40 CFR Chapter 1, Subchapter B, and all terms and conditions of this agreement and any attachments.

ISSUING OFFICE (GRANTS MANAGEMENT OFFICE)	AWARD APPROVAL OFFICE
ORGANIZATION / ADDRESS	ORGANIZATION / ADDRESS
U.S. EPA, Region 9 Grants Management Office, MTS-7 75 Hawthorne Street San Francisco, CA 94105	U.S. EPA, Region 9 Communities and Ecosystems Division, CED-1 75 Hawthorne Street San Francisco, CA 94105

THE UNITED STATES OF AMERICA BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY

Digital signature applied by EPA Award Official Denise Zvanovec - Grants Management Officer	DATE 09/11/2013

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EPA Funding Information

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FUNDS	FORMER AWARD	THIS ACTION	AMENDED TOTAL
EPA Amount This Action	$	$ 1,373,863	$ 1,373,863
EPA In-Kind Amount	$	$	$ 0
Unexpended Prior Year Balance	$	$	$ 0
Other Federal Funds	$	$	$ 0
Recipient Contribution	$	$ 1,156,854	$ 1,156,854
State Contribution	$	$	$ 0
Local Contribution	$	$	$ 0
Other Contribution	$	$	$ 0
Allowable Project Cost	$ 0	$ 2,530,717	$ 2,530,717

Assistance Program (CFDA)	Statutory Authority	Regulatory Authority
66.605 - Performance Partnership Grants	Appropriations Act of 1996 (PL 104-134)	40 CFR PTS 31 & 35 SUBPT A

Fiscal

Site Name	Req No	FY	Approp. Code	Budget Organization	PRC	Object Class	Site/Project	Cost Organization	Obligation / Deobligation
-	1309FE0114	13	E1	09F2	501E12	4108	-	-	700,610
-	1309FE0114	13	E1	09F2	401C09	4108	-	-	531,391
-	1309FE0114	13	E1	09F2	501E13	4108	-	-	28,250
-	1309FE0114	11	E1D	09F2	401C09	4108	-	-	49,797
-	1309FE0114	12	E1D	09F2	401C09	4108	-	-	41,094
-	1309FE0114	13	E1	09F2	401C09	4108	-	-	22,721
									1,373,863

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Budget Summary Page

Table A - Object Class Category (Non-construction)	Total Approved Allowable Budget Period Cost
1. Personnel	$1,985,070
2. Fringe Benefits	$734,461
3. Travel	$0
4. Equipment	$0
5. Supplies	$0
6. Contractual	$1,127,003
7. Construction	$0
8. Other	$0
9. Total Direct Charges	$3,846,534
10. Indirect Costs: % Base Refer to Condition #15	$1,415,870
11. Total (Share: Recipient % Federal %.)	$5,262,404
12. Total Approved Assistance Amount	$1,373,863
13. Program Income	$0
14. Total EPA Amount Awarded This Action	$1,373,863
15. Total EPA Amount Awarded To Date	$1,373,863

Detailed Table B Budget Page: 1

Table B - Program Element Classification (Non-construction)	Total Approved Allowable Budget Period Cost
1.	$
2. AMOUNTS FOR THIS ACTION: Pesticide - Enforcement 501 (Federal) This Action = $728,860 Pesticide - Programs 401 (Federal) This Action = $645,003 Pesticide - Enforcement (Match) Cumulative Total = $771,236 Pesticide - Programs (Match) Cumulative Total = $385,618	$
3.	$
4.	$
5.	$
6.	$
7.	$
8.	$
9.	$
10.	$
11. Total (Share: Recip % Fed %)	$
12. Total Approved Assistance Amount	$

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Administrative Conditions

1. Federal Financial Report (SF 425)

The final Federal Financial Report (FFR) covering the entire project period shall be submitted within 90 days after the end of the project period according to 40 CFR Part 31.23(b) and 31.41(b). The LVFC will make adjustments, as necessary, to obligated funds after reviewing and accepting a final Federal Financial Report. Recipients will be notified and instructed by EPA if they must complete any additional forms for the closeout of the assistance agreement.

For awards with cumulative project and budget periods greater than 12 months, an interim FFR covering the period from "project/budget period start date" to **June 30** of each calendar year shall be submitted to the U.S. EPA Las Vegas Finance Center, 4220 South Maryland Parkway, Bldg. C, Room 503, Las Vegas, NV 89193-8515, no later than **September 30** of the same calendar year.

2. Single Audit Act

In accordance with OMB Circular A-133, which implements the Single Audit Act, the recipient hereby agrees to obtain a single audit from an independent auditor, if it expends $500,000 or more in total Federal funds in any fiscal year. Within nine months after the end of a recipient's fiscal year or 30 days after receiving the report from the auditor, the recipient shall submit the SF-SAC and a Single Audit Report Package. The recipient **MUST** submit the SF-SAC and a Single Audit Report Package using the Federal Audit Clearinghouse's Internet Data Entry System. For complete information on how to accomplish the single audit submissions, you will need to visit the Federal Audit Clearinghouse Web site: http://harvester.census.gov/fac/.

3. Central Contractor Registration/System for Award Management and Universal Identifier Requirements.

A. Requirement for Central Contractor Registration (CCR)/System for Award Management (SAM). Unless you are exempted from this requirement under 2 CFR 25.110, you as the recipient must maintain the currency of your information in the SAM until you submit the final financial report required under this award or receive the final payment, whichever is later. This requires that you review and update the information at least annually after the initial registration, and more frequently if required by changes in your information or another award term.

B. Requirement for Data Universal Numbering System (DUNS) numbers. If you are authorized to make subawards under this award, you:

1. Must notify potential subrecipients that no entity (see definition in paragraph C of this award term) may receive a subaward from you unless the entity has provided its DUNS number to you.

2. May not make a subaward to an entity unless the entity has provided its DUNS number to you.

C. Definitions. For purposes of this award term:

1. Central Contractor Registration (CCR)/System for Award Management (SAM) means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the System for Award Management (SAM) Internet site http://www.sam.gov.

2. Data Universal Numbering System (DUNS) number means the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently 866-705-5711) or the Internet (currently at http://fedgov.dnb.com/webform).

3. Entity, as it is used in this award term, means all of the following, as defined at 2 CFR part 25, subpart C:
   a. A Governmental organization, which is a State, local government, or Indian tribe;

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b. A foreign public entity;
c. A domestic or foreign nonprofit organization;
d. A domestic or foreign for-profit organization; and
e. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

4. Subaward:
   a. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
   b. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. --.210 of the attachment to OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations").
   c. A subaward may be provided through any legal agreement, including an agreement that you consider a contract.

5. Subrecipient means an entity that:
   a. Receives a subaward from you under this award; and
   b. Is accountable to you for the use of the Federal funds provided by the subaward.

4. Reporting Subawards and Executive Compensation

a. Reporting of first-tier subawards.
1.Applicability. Unless you are exempt as provided in paragraph d. of this award term, you must report each action that obligates $25,000 or more in Federal funds that does not include Recovery funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5) for a subaward to an entity (see definitions in paragraph e of this award term).
2. Where and when to report.
i. You must report each obligating action described in paragraph a.1. of this award term to www.fsrs.gov.
ii. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)
3. What to report. You must report the information about each obligating action that the submission instructions posted at www.fsrs.gov specify.

b. Reporting Total Compensation of Recipient Executives.
1. Applicability and what to report. You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if –
i. The total Federal funding authorized to date under this award is $25,000 or more;
ii. In the preceding fiscal year, you received—
(A) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
(B) $25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.)
2. Where and when to report. You must report executive total compensation described in paragraph b.1. of this award term:
i. As part of your Central Contractor Registration/System for Award Management profile available at www.sam.gov.
ii. By the end of the month following the month in which this award is made, and annually thereafter.

c. Reporting of Total Compensation of Subrecipient Executives.

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1. Applicability and what to report. Unless you are exempt as provided in paragraph d. of this award term, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if –

   i. In the subrecipient's preceding fiscal year, the subrecipient received—

      (A) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

      B) $25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and

   ii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.)

2. Where and when to report. You must report subrecipient executive total compensation described in paragraph c.1. of this award term:

   i. To the recipient.

   ii. By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (i.e., between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

d. Exemptions. If, in the previous tax year, you had gross income, from all sources, under $300,000, you are exempt from the requirements to report:

i. subawards, and

ii. the total compensation of the five most highly compensated executives of any subrecipient.

e. Definitions. For purposes of this award term:

1. Entity means all of the following, as defined in 2 CFR part 25:

   i. A Governmental organization, which is a State, local government, or Indian tribe;

   ii. A foreign public entity;

   iii. A domestic or foreign nonprofit organization;

   iv. A domestic or foreign for-profit organization;

   v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

2. Executive means officers, managing partners, or any other employees in management positions.

3. Subaward:

   i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.

   ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. –.210 of the attachment to OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations").

   iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.

4. Subrecipient means an entity that:

   i. Receives a subaward from you (the recipient) under this award; and

   ii. Is accountable to you for the use of the Federal funds provided by the subaward.

5. Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):

   i. Salary and bonus .

   ii. *Awards of stock, stock options, and stock appreciation rights* . Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.

   iii. *Earnings for services under non-equity incentive plans* . This does not include group life,

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health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
iv. *Change in pension value.* This is the change in present value of defined benefit and actuarial pension plans.
v. *Above-market earnings on deferred compensation which is not tax-qualified* .
vi. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds $10,000.

5. Trafficking in Persons

a. *Provisions applicable to a recipient that is a private entity*
1. You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not—
i. Engage in severe forms of trafficking in persons during the period of time that the award is in effect;
ii. Procure a commercial sex act during the period of time that the award is in effect; or
iii. Use forced labor in the performance of the award or subawards under the award.
2. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity —
i. Is determined to have violated a prohibition in paragraph a.1 of this award term; or
ii. Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.1 of this award term through conduct that is either—
A. Associated with performance under this award; or
B. Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our Agency at 2 CFR 1532.

b. *Provision applicable to a recipient other than a private entity* . We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity—
1. Is determined to have violated an applicable prohibition in paragraph a.1 of this award term; or
2. Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a.1 of this award term through conduct that is either—
i. Associated with performance under this award; or
ii. Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 CFR 1532

c. *Provisions applicable to any recipient* .
1. You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph a.1 of this award term.
2. Our right to terminate unilaterally that is described in paragraph a.2 or b of this section:
i. Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and
ii. Is in addition to all other remedies for noncompliance that are available to us under this award.
3. You must include the requirements of paragraph a.1 of this award term in any subaward you make to a private entity.

d. *Definitions* . For purposes of this award term:
1. "Employee" means either:
i. An individual employed by you or a subrecipient who is engaged in the performance of the project or program under
this award; or
ii. Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.
2. "Forced labor" means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt

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bondage, or slavery.

3. "Private entity":
   i. Means any entity other than a State, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.
   ii. Includes:
   A. A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).
   B. A for-profit organization.

4. "Severe forms of trafficking in persons," "commercial sex act," and "coercion" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

6. Recycled Paper

In accordance with Executive Order 13423 (Strengthening Federal Environmental, Energy and Transportation Management dated January 24, 2007), EPA Order 1000.25 and 40 CFR Part 30.16 (as applicable), the recipient shall use recycled paper and double sided printing for all reports which are prepared as a part of this agreement and delivered to EPA. This requirement does not apply to reports prepared on forms supplied by EPA, or to Standard Forms, which are printed on recycled paper and are available through the General Services Administration. The recipient shall give preference in its procurement programs funded with Federal funds to the purchase of recycled products pursuant to EPA's guidelines, as applicable.

Any State agency or agency of a political subdivision of a State shall also comply with the requirements set forth in the Resource Conservation and Recovery Act (RCRA), Section 6002 (42 U.S.C. 6962), which requires that preference be given in procurement programs to the purchase of specific products containing recycled materials identified in guidelines developed by EPA under 40 CFR Part 247. Regulations issued under RCRA Section 6002 apply to any acquisition of an item where the purchase price exceeds $10,000 or where the quantity of such items acquired in the course of the preceding fiscal year was $10,000 or more.

7. Hotel and Motel Fire Safety

The recipient agrees to ensure that all conference, meeting, convention, or training funded in whole or in part with Federal funds complies with the protection and control guidelines of the Hotel and Motel Fire Safety Act (PL 101-391, as amended). Recipients may search the Hotel-Motel National Master List at http://www.usfa.dhs.gov/applications/hotel/ to see if a property is in compliance (FEMA ID is currently not required), or to find other information about the Act. (Refer to 40 CFR Part 30.18 and 15 U.S.C. 2225a, as applicable.)

8. Drug-Free Workplace

The recipient organization of this EPA assistance agreement must make an ongoing, good faith effort to maintain a drug-free workplace pursuant to the specific requirements set forth in Title 2 CFR Part 1536 Subpart B. Additionally, in accordance with these regulations, the recipient organization must identify all known workplaces under its federal awards, and keep this information on file during the performance of the award. Those recipients who are individuals must comply with the drug-free provisions set forth in Title 2 CFR Part 1536 Subpart C.

The consequences for violating this condition are detailed under Title 2 CFR Part 1536 Subpart E. Recipients can access the Code of Federal Regulations (CFR) Title 2 Part 1536 at http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=701081165f70316effa8ebf67df73de0&rgn=div5&view=text&node=2:1.2.11.11.2&idno=2.

9. Debarment, Suspension and Other Responsibility Matters

The recipient shall fully comply with Subpart C of 2 CFR Part 180 and 2 CFR Part 1532, entitled "Responsibilities of Participants Regarding Transactions (Doing Business with Other Persons)." The recipient is responsible for ensuring that any lower tier covered transaction as described in Subpart B of 2 CFR Part 180 and 2 CFR Part 1532, entitled "Covered Transactions," includes a term or condition requiring compliance with Subpart C. The recipient is responsible for further requiring the inclusion of a similar term or condition in any subsequent lower tier covered transactions. The recipient acknowledges that failing to disclose the information as required at 2 CFR 180.335 may result in the delay or negation of

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this assistance agreement, or pursuance of legal remedies, including suspension and debarment.

Recipients may access suspension and debarment information at http://www.sam.gov. This system allows recipients to perform searches determining whether an entity or individual is excluded from receiving Federal assistance. This term and condition supersedes EPA Form 5700-49, "Certification Regarding Debarment, Suspension, and Other Responsibility Matters."

10. Reimbursement Limitation

EPA's financial obligations to the recipient are limited by the amount of federal funding awarded to date as shown on line 15 in its EPA approved budget. If the recipient incurs costs in anticipation of receiving additional funds from EPA, it does so at its own risk.

11. Management Fees

Management fees or similar charges in excess of the direct costs and approved indirect rates are not allowable. The term "management fees or similar charges" refers to expenses added to the direct costs in order to accumulate and reserve funds for ongoing business expenses, unforeseen liabilities, or for other similar costs which are not allowable under this assistance agreement. Management fees or similar charges may not be used to improve or expand the project funded under this agreement, except to the extent authorized as a direct cost of carrying out the scope of work.

12. Lobbying and Litigation Prohibition

The recipient shall ensure that no grant funds awarded under this assistance agreement are used to engage in lobbying of the Federal Government or in litigation against the United States unless authorized under existing law. The recipient shall abide by 2 CFR 225 (OMB Circular A-87), which prohibits the use of federal grant funds for litigation against the United States or for lobbying or other political activities.

The recipient agrees to comply with Title 40 CFR Part 34, *New Restrictions on Lobbying* . The recipient shall include the language of this provision in award documents for all subawards exceeding $100,000, and require that subrecipients submit certification and disclosure forms accordingly. In accordance with the Byrd Anti-Lobbying Amendment, any recipient who makes a prohibited expenditure under Title 40 CFR Part 34 or fails to file the required certification or lobbying forms shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such expenditure.

13. Utilization of Disadvantaged Business Enterprises

The recipient agrees to comply with the requirements of EPA's Program for Utilization of Small, Minority and Women's Business Enterprises in procurement under assistance agreements as set forth in 40 CFR Part 33. The EPA DBE rule can be accessed at http://www.epa.gov/osbp. In addition, the recipient agrees to make good faith efforts whenever procuring construction, equipment, services and supplies under an EPA assistance agreement, and to ensure that sub-recipients, loan recipients, and prime contractors also comply with 40 CFR Section 33.301. Records documenting compliance with the six good faith efforts shall be retained.

The recipient accepts the applicable MBE/WBE fair share objectives/goals negotiated with EPA by the **California State Water Resources Control Board**, as follows:

	MBE	WBE
Construction	2%	1%
Equipment	1%	1%
Services	1%	1%
Supplies	1%	1%

By signing this financial assistance agreement, the recipient is accepting the fair share objectives/goals stated above and attests to the fact that it is purchasing the same or similar construction, supplies, services and equipment, in the same or similar relevant geographic buying market as **California State Water Resources Control Board**.

Pursuant to 40 CFR Section 33.404, the recipient has the option to negotiate its own MBE/WBE fair share

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objectives/goals. If the recipient wishes to negotiate its own MBE/WBE fair share objectives/goals, the recipient agrees to submit proposed MBE/WBE objectives/goals based on an availability analysis, or disparity study, of qualified MBEs and WBEs in their relevant geographic buying market for construction, services, supplies and equipment.

The submission of proposed fair share goals with the supporting analysis or disparity study means that the recipient is not accepting the fair share objectives/goals of another recipient. The recipient agrees to submit proposed fair share objectives/goals, together with the supporting availability analysis or disparity study to **Joe Ochab, MTS-7**, the Regional MBE/WBE Coordinator, within 120 days of acceptance of the financial assistance award. EPA will respond to the proposed fair share objectives/goals within 30 days of receiving the submission. If proposed fair share objectives/goals are not received within the 120 day time frame, the recipient may not expend its EPA funds for procurements until the proposed fair share objectives/goals are submitted.

A recipient of a Continuing Environmental Program Grant or other annual grant agrees to create and maintain a bidders list. A recipient of an EPA financial assistance agreement to capitalize a revolving loan fund also agrees to require entities receiving identified loans to create and maintain a bidders' list if the recipient of the loan is subject to, or chooses to follow, competitive bidding requirements. Refer to 40 CFR Section 33.501 (b) and (c) for specific requirements and exemptions.

14. MBE/WBE Utilization Report

The recipient agrees to complete and submit to GrantsRegion9@epa.gov a MBE/WBE Utilization Report (EPA Form 5700-52A) within 30 days after the end of the Federal fiscal year; i.e., by October 30 of each calendar year. Negative reports are required. Only procurements with certified MBE/WBEs are counted towards a recipient's MBE/WBE accomplishments. A final MBE/WBE report must be submitted within 90 days after the end of the project period. Your grant cannot be officially closed without all MBE/WBE reports. EPA Form 5700-52A may be obtained from the EPA Office of Small Business Program's Home Page on the internet at www.epa.gov/osbp.

15. Indirect Costs

The cost principles of 2 CFR Part 225 (OMB Circular A-87), "Cost Principles for State, Local, and Indian Tribal Governments," applies to this agreement.

If the recipient does not have a previously established indirect cost rate, it agrees that it will prepare its indirect cost rate proposal and/or cost allocation plan and in accordance with OMB Circular A-87, "Cost Principles for State, Local, and Indian Tribal Governments." For proposal preparation, the recipient may use the appropriate completeness checklist located at: http://www.aqd.nbc.gov/services/ICS.aspx

The recipient must send its proposal to its cognizant federal agency within six (6) months after the close of the governmental unit's fiscal year. If EPA is the cognizant federal agency, the state recipient must send its indirect cost rate proposal within six (6) months after the close of the governmental unit's fiscal year to:

Regular Mail

Financial Analysis and Rate Negotiation Service Center
Office of Acquisition Management
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW, MC 3802R
Washington, DC 20460

Mail Courier (e.g. FedEx, UPS, etc.)

Financial Analysis and Rate Negotiation Service Center
Office of Acquisition Management
US Environmental Protection Agency
1300 Pennsylvania Avenue, NW, 6th floor
Bid and Proposal Room Number 61107
Washington, DC 20004

Electronic submissions of proposals may be sent via email to OGD_IndirectCost@epa.gov.

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Recipients are entitled to reimbursement of indirect costs, subject to any statutory or regulatory administrative cost limitations, if they have a current rate agreement or have submitted an indirect cost rate proposal to their cognizant federal agency for review and approval. Recipients are responsible for maintaining an approved indirect cost rate throughout the life of the award. Recipients may draw down grant funds once a rate has been approved, but only for indirect costs incurred during the period specified in the rate agreement. Recipients are not entitled to indirect costs for any period in which the rate has expired.

Recipients with differences between provisional and final rates are not entitled to more than the award amount. Recipients may request EPA approval to rebudget funds from direct cost categories to the indirect cost category (to grants which have not expired or been closed out) to cover increased indirect costs.

Pursuant to 40 CFR 31.26, a recipient agrees to comply with the audit requirements prescribed in the Single Audit Act Amendments, and revised OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations," including Subpart C Section 305(b) which addresses the restriction on auditors preparing indirect cost proposals.

16. Civil Rights Obligations

GENERAL

This term and condition incorporates by reference the signed assurance provided by the recipient's authorized representative on: 1) EPA Form 4700-4, "Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance"; and 2) Standard Form 424B or Standard Form 424D, as applicable. These assurances and this term and condition obligate the recipient to comply fully with applicable civil rights statutes and implementing EPA regulations.

STATUTORY REQUIREMENTS

In carrying out this agreement, the recipient must comply with:

- Title VI of the Civil Rights Act of 1964, which prohibits discrimination based on race, color, and national origin, including limited English proficiency (LEP), by entities receiving Federal financial assistance.
- Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination against persons with disabilities by entities receiving Federal financial assistance; and
- The Age Discrimination Act of 1975, which prohibits age discrimination by entities receiving Federal financial assistance.

If the recipient is conducting an education program under this agreement, it must also comply with:

- Title IX of the Education Amendments of 1972, which prohibits discrimination on the basis of sex in education programs and activities operated by entities receiving Federal financial assistance.

If this agreement is funded with financial assistance under the Clean Water Act (CWA), the recipient must also comply with:

- Section 13 of the Federal Water Pollution Control Act Amendments of 1972, which prohibits discrimination on the basis of sex in CWA-funded programs or activities.

REGULATORY REQUIREMENTS

The recipient agrees to comply with all applicable EPA civil rights regulations, including:

- For Title IX obligations, 40 C.F.R. Part 5; and
- For Title VI, Section 504, Age Discrimination Act, and Section 13 obligations, 40 C.F.R. Part 7.
- As noted on the EPA Form 4700-4 signed by the recipient's authorized representative, these regulations establish specific requirements including maintaining compliance information, establishing grievance procedures, designating a Civil Rights Coordinator, and providing notices of non-discrimination.

TITLE VI – LEP, Public Participation and Affirmative Compliance Obligation

- As a recipient of EPA financial assistance, you are required by Title VI of the Civil Rights Act to

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provide meaningful access to LEP individuals. In implementing that requirement, the recipient agrees to use as a guide the Office of Civil Rights (OCR) document entitled *"Guidance to Environmental Protection Agency Financial Assistance Recipients Regarding Title VI Prohibition Against National Origin Discrimination Affecting Limited English Proficient Persons."* The guidance can be found at *http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2004_register&docid=fr25jn04-79.pd*

- If the recipient is administering permitting programs under this agreement, the recipient agrees to use as a guide OCR's Title VI Public Involvement Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs. The Guidance can be found at http://edocket.access.gpo.gov/2006/pdf/06-2691.pdf.

- In accepting this assistance agreement, the recipient acknowledges it has an affirmative obligation to implement effective Title VI compliance programs and ensure that its actions do not involve discriminatory treatment and do not have discriminatory effects even when facially neutral. The recipient must be prepared to demonstrate to EPA that such compliance programs exist and are being implemented or to otherwise demonstrate how it is meeting its Title VI obligations.

17. Payment to Consultants

Per 40 CFR Part 31.36(j), EPA's participation in the salary rate (excluding overhead and travel) paid to individual consultants retained by recipients or by a recipient's contractors or subcontractors shall be limited to the maximum daily rate for a Level IV of the Executive Schedule, to be adjusted annually. The Federal Executive Schedule (i.e., Salary Table) is located at: **http://www.opm.gov/oca/**
This limit applies to consultation services of designated individuals with specialized skills and if the terms of the contract provide the recipient with responsibility for the selection, direction, and control of the individuals who will be providing services under the contract at an hourly or daily rate of compensation. This rate does not include overhead or travel costs and the recipient may pay these in accordance with its normal travel practices.

Subagreements with firms or individuals for services which are awarded using the procurement requirements in 40 CFR Part 31, are not affected by this limitation unless the terms of the contract provide the recipient with responsibility for the selection, direction, and control of the individuals who will be providing services under the contract at an hourly or daily rate of compensation. See 40 CFR Part 31.36(j)(2).

18. Procurement

The recipient will ensure all procurement transactions will be conducted in a manner providing full and open competition consistent with EPA regulations under 40 CFR Part 30.43, 31.36 or 35.6555, as applicable. In accordance with 40 CFR Part 30.45, 31.36(f) or 35.6585, as applicable, the grantee and subgrantee(s) must perform a cost or price analysis in connection with every procurement action, including contract modifications.

19. Subawards

a. The recipient agrees to:
(1) Establish all subaward agreements in writing;
(2) Maintain primary responsibility for ensuring successful completion of the EPA-approved project (this responsibility cannot be delegated or transferred to a subrecipient);
(3) Ensure that any subawards comply with the standards in Section 210(a)-(d) of OMB Circular A-133 and are not used to acquire commercial goods or services for the recipient;
(4) Ensure that any subawards are awarded to eligible subrecipients and that proposed subaward costs are necessary, reasonable, and allocable;
(5) Ensure that any subawards to 501(c)(4) organizations do not involve lobbying activities;
(6) Monitor the performance of their recipients and ensure that they comply with all applicable regulations, statutes, and terms and conditions which flow down in the subaward;
(7) Obtain EPA's consent before making a subaward to a foreign or international organization, or a subaward to be performed in a foreign country; and
(8) Obtain approval from EPA for any new subaward work that is not outlined in the approved work plan in accordance with 40 CFR Parts 30.25 and 31.30, as applicable.

b. Any questions about subrecipient eligibility or other issues pertaining to subawards should be addressed to the recipient's EPA Project Officer. Additional information regarding subawards may be

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found at http://www.epa.gov/ogd/guide/subaward-policy-part-2.pdf. Guidance for distinguishing between vendor and subrecipient relationships and ensuring compliance with Section 210(a)-(d) of OMB Circular A-133 can be found at http://www.epa.gov/ogd/guide/subawards-appendix-b.pdf and http://www.whitehouse.gov/omb/financial_fin_single_audit

c. The recipient is responsible for selecting its subrecipients and, if applicable, for conducting subaward competitions.

Programmatic Conditions

P1. The U.S. EPA will be substantially involved in overseeing and monitoring this cooperative agreement. Involvement includes oversight of pesticide programs including pesticide enforcement, endangered species and worker safety (agricultural worker protection and applicator certification). For example:

Pesticide Enforcement: States may cooperate in the enforcement authority for pesticide use inspections by entering into a cooperative agreement with EPA and maintaining and effective program for enforcing pesticide use regulations. As such, EPA has oversight responsibilities to ensure that basic elements of the enforcement program are carried out adequately including, but not limited to:

- review and recommend improvements to pesticide inspections;
- monitor state investigation and enforcement response on significant pesticide incidents;
- issue federal inspector credentials to state employees consistent with EPA policy and guidance;
- review and comment on inspection files which are submitted to Region 9 (Market Place and Producer Establishment Inspections);
- request additional information when needed for federal case development;
- provide inspector training to state inspectors;
- issue special investigation requests for state inspectors to conduct inspections on EPA's behalf.

Pesticide Applicator Certification: EPA reviews and approves the state plan for certifying restricted use pesticide applicators.

Worker Protection Standard: Ensures that OPP/OECA Guidance for baseline worker protection programs is conducted and activities reported.

P2. The California Department of Pesticide Regulation is reporting per national program guidance for Enforcement, Certification & Training (C&T), and Pesticide Program Implementation.

The recipient agrees to submit quarterly progress reports to the EPA Project Officer within 30 calendar days after the end of each Federal fiscal quarter (October 30, January 30, April 30, and July 30). These reports should include a discussion of the activities conducted during the quarter and progress towards milestones, problems encountered and their resolution, and activities planned for the next quarter. In addition, CDPR will inform EPA as soon as problems, delays or adverse conditions become known which will materially impair the ability to meet the outputs/outcomes specified in the assistance agreement work plan. CDPR will report per national program guidance for Enforcement, C&T, and Pesticide Program Implementation. National Guidance includes reporting on national program measures (Enforcement and C&T). Within 90 days of the end of the project period, the recipient must submit a final report documenting project activities over the entire project period and the recipient's achievements with respect to the project's purposes and objectives.

P3. This grant includes the performance of environmental measurements; a Quality Assurance Program Plan must be prepared. The recipient should consult with the Region 9 Quality Assurance Office to determine what guidance should be followed. The QA Plan must be approved by the EPA Project Officer, the Region 9 Quality Assurance Manager, and the recipient's Quality Assurance Officer before measurement activities are undertaken. Contact the QA Office at 415-972-3411.

P4. Funds awarded under this cooperative agreement may not be used to purchase or pay for pesticide applications or pesticides.

P5. Unless the event(s) are specified in the approved workplan, the recipient agrees to obtain prior approval from EPA for the use of grant funds for light refreshments and/or meals served at meetings, conferences, training workshops, and outreach activities (events). The recipient must send requests for approval to the EPA Project Officer and include:

(1) An estimated budget and description for the light refreshments, meals, and/or beverages to

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be served at the event(s);
(2) A description of the purpose, agenda, location, length and timing for the event.
(3) An estimated number of participants in the event and a description of their roles.

Recipients may address questions about whether costs for light refreshments, and meals for events are allowable to the recipient's EPA Project Officer. However, the Agency Award Official or Grant Management Officer will make final determinations on allowability.

Note: U.S. General Services Administration regulations define light refreshments for morning, afternoon or evening breaks to include, but not be limited to, coffee, tea, milk, juice, soft drinks, donuts, bagels, fruit, pretzels, cookies, chips, or muffins. (41 CFR 301-74.11)

P6. EPA may terminate the assistance agreement for failure of the recipient to make sufficient progress so as to reasonably ensure completion of the project within the project period, including any extensions. EPA will measure sufficient progress by examining the performance required under the workplan in conjunction with the milestone schedule, the time remaining for performance within the project period, and/or the availability of funds necessary to complete the project.

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