

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

AGREEMENT NUMBER 11-C0118
REGISTRATION NUMBER 1224071

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: **\$200,000.00**
Two 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	5 Pages
Exhibit B – Budget Detail and Payment Provisions	5 Pages
Exhibit C* – General Terms and Conditions (GIA 610)	
Exhibit D - Special Terms and Conditions	1 Page
Exhibit E – Additional Terms and Conditions	1 Page
Exhibit F – Resume of Principal Investigator Brian Anderson	36 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		California Department of General Services Use Only <div style="border: 2px solid black; padding: 10px; width: fit-content; margin: 0 auto;"> APPROVED <div style="border: 1px solid black; padding: 5px; width: 80px; margin: 0 auto;"> JUN 8 2012 </div> DEPT OF GENERAL SERVICES </div> <input type="checkbox"/> Exempt per: <i>Richard L. Bell</i>
CONTRACTOR'S NAME (if other than an individual, state whether a corporation, partnership, etc.) The Regents of the University of California		
BY (Authorized Signature) <i>Kathleen P Nolan</i>	DATE SIGNED (Do not type) 5-18-12	
PRINTED NAME AND TITLE OF PERSON SIGNING Kathleen P. Nolan, J.D., Associate Director <i>wp</i>		
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) <i>JoAnne Payan</i>	DATE SIGNED (Do not type) 5/23/12	
PRINTED NAME AND TITLE OF PERSON SIGNING JoAnne Payan, Assistant Director		
ADDRESS 1001 I Street, Sacramento, CA 95814		

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

AGREEMENT NUMBER 11-C0118
REGISTRATION NUMBER

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: **\$200,000.00**
Two 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	5 Pages
Exhibit B – Budget Detail and Payment Provisions	5 Pages
Exhibit C* – General Terms and Conditions (GIA 610)	
Exhibit D - Special Terms and Conditions	1 Page
Exhibit E – Additional Terms and Conditions	1 Page
Exhibit F – Resume of Principal Investigator Brian Anderson	36 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		California Department of General Services Use Only  <input type="checkbox"/> Exempt per: <i>Richard L. Goldney</i>
CONTRACTOR'S NAME (if other than an individual, state whether a corporation, partnership, etc.) The Regents of the University of California		
BY (Authorized Signature) <i>Kathleen P. Nolan</i>	DATE SIGNED (Do not type) <i>5-18-12</i>	
PRINTED NAME AND TITLE OF PERSON SIGNING Kathleen P. Nolan, J.D., Associate Director <i>MPK</i>		
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) <i>JoAnne Payan</i>	DATE SIGNED (Do not type) <i>5/23/12</i>	
PRINTED NAME AND TITLE OF PERSON SIGNING JoAnne Payan, Assistant Director		
ADDRESS 1001 I Street, Sacramento, CA 95814		

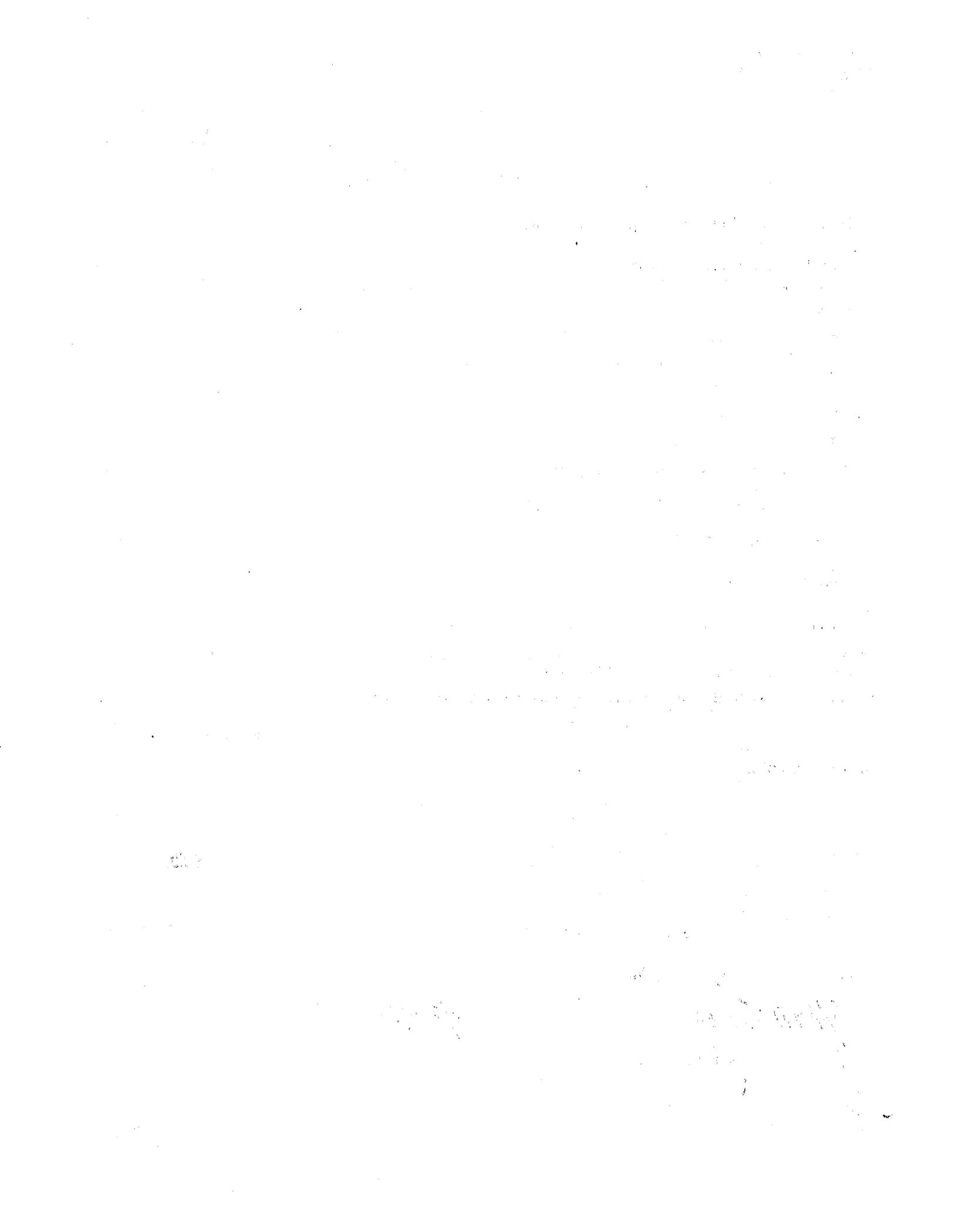


EXHIBIT A
STANDARD AGREEMENT

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:

Mary Ellen Kirkchaney, Contracts & Grants Analyst
Sponsored Programs Office
University of California, Davis
1850 Research Park Drive, Suite 300
Davis, CA 95618-6153

Phone: 530-754-8091

FAX: 530-754-8229

Email Address: mekirkchaney@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

Recent monitoring has demonstrated that the Santa Maria River watershed is contaminated with toxic concentrations of pesticides, including diazinon, chlorpyrifos and several pyrethroid pesticides. As part of ongoing Total Maximum Daily Load (TMDL) priorities in the Santa Maria River watershed, the proposed project will evaluate a pesticide source reduction system at key locations in the Bradley Channel watershed. The Bradley Channel watershed is an important tributary to the Santa Maria River watershed and is contaminated with pesticides prioritized for TMDLs in the larger watershed. Pesticide loading will be reduced by treating Bradley Channel water with enzymes developed by Commonwealth Scientific and Research Organization, Australia's national science agency. The two enzymes are derived from naturally-occurring soil bacteria, and have been shown to be effective at greatly reducing pesticide loads in agriculture tailwater runoff. The proposed project will be conducted in partnership with selected growers and agency stakeholders in this watershed. The project is designed to treat Bradley Channel, which is the source of pesticides to the Bradley Basin. Pesticides will be monitored upstream and downstream of the treatment input, and this information will be used to quantify pesticide load reduction. In addition, macroinvertebrate bioassessments will be conducted in the Bradley Basin

EXHIBIT A STANDARD AGREEMENT

before and after enzyme treatment to evaluate reduction of pesticides in this receiving system, and to determine any changes in the macroinvertebrate community in this system. This project will reduce pesticide loads that have been demonstrated to cause TMDL listings in Central Coast watersheds. The results of this project will demonstrate the utility of this technology for pesticide source control in California agriculture.

5. Work to Be Performed

Task 1 (Year 1): Design Landguard the enzyme treatment system, identify the optimal treatment station, and obtain access permission.

UCD scientists will design the enzyme treatment based on site characteristics and pesticide loading rates (Task 2 below). At the same time, UCD scientists will work with Central Coast Regional Water Board staff and Santa Barbara County Department of Public Works staff to define the project location and obtain access permission.

Task 2 (Year 1): Confirm pesticide loading in the Bradley Channel watershed.

Conduct bi-weekly surveys of the Bradley Channel at its input into the Bradley Pond. Surveys will be conducted bi-weekly to determine the magnitude of pesticide loading (organophosphate and pyrethroid pesticides) at the peak of irrigation. In addition, 96-hour toxicity tests will be conducted with *Ceriodaphnia dubia* and *Hyalella azteca* to establish baseline water column toxicity in this system. Six surveys will be conducted between June and August 2012.

Task 3 (Year 1): Conduct baseline toxicity and chemical assessment and macroinvertebrate bioassessment of Bradley Basin.

Establish baseline toxicity in Bradley Basin by conducting 96-hour *C. dubia* and *H. azteca* water column toxicity tests, and 10-day *H. azteca* sediment toxicity tests at five stations. Conduct pesticide analyses of all water and sediment samples for organophosphate and pyrethroid pesticides. Conduct benthic macroinvertebrate surveys at ten stations in the Bradley Basin to characterize the insect community in this system prior to Landguard treatment.

Task 4 (Year 1): Evaluate efficacy of Landguard enzymes to detoxify pesticides

Conduct Landguard efficacy toxicity tests with samples collected as part of Task 1 to verify the appropriate Landguard dose and mixing time for detoxifying organophosphate and pyrethroid pesticides.

EXHIBIT A
STANDARD AGREEMENT

Task 5 (Year 2): Establish enzyme dosing unit at treatment station. Conduct pesticide load reduction enzyme treatment.

In collaboration with Regional Water Board and Santa Barbara County public works staff, install the Landguard dosing unit in the Bradley Channel upstream of where the channel enters Bradley Basin. Conduct toxicity and load reduction experiments with Landguard A900 (organophosphate hydrolysis) and Landguard SP (synthetic pyrethroid hydrolysis) enzyme. Conduct experiments for 8 weeks (e.g., June – July). Collect water samples once per week for eight successive weeks for toxicity testing and pesticide analysis. Conduct water column toxicity tests with *C. dubia* and *H. azteca*. Analyze treated and untreated samples for organophosphate and pyrethroid pesticides.

Task 6 (Year 2): Conduct follow-up assessment of Bradley Basin to document reductions in chemistry of water, sediment and biota, and conduct follow-up macroinvertebrate bioassessment to document ecological change.

At the end of the eight (8) week enzyme treatment period (Task 5), conduct chemistry and toxicity assessments in the Bradley Basin to determine efficacy of the enzyme treatments. Collect water and sediment samples at the same five (5) stations sampled in Task 3 and conduct toxicity tests (96-hour *C. dubia* and *H. azteca* for water and ten (10)-day *H. azteca* for sediment). Analyze water and sediment for organophosphate and pyrethroid pesticides. Conduct a benthic macroinvertebrate bioassessment at the same ten (10) stations sampled in Task 3.

Task 7 (Year 2): Conduct stakeholder workshop to disseminate project results.

In collaboration with the Central Coast Regional Water Board, the Cachuma Lake Resource Conservation District and University of California Cooperative Extension, conduct one stakeholder workshop to disseminate project results.

Task 8 (Year 2): Complete final project report.

EXHIBIT A
STANDARD AGREEMENT

6. Project Timeline

Task 1	Design Landguard enzyme treatment system, identify treatment station, and obtain access permission	June 2012 – March 2013
Task 2	Confirm pesticide loading in the Bradley Channel watershed	June 2012 – August 2012
Task 3	Conduct baseline toxicity and chemical assessment and macroinvertebrate bioassessment of Bradley Basin	August 2012
Task 4	Evaluate efficacy of Landguard enzymes to detoxify pesticides	September 2012 – June 2013
Task 5	Establish enzyme dosing unit at treatment station. Conduct pesticide load reduction enzyme treatments at all stations	June 2013 – August 2013
Task 6	Conduct follow-up assessment of Bradley Basin to document reductions in chemistry of water, sediment and biota, and conduct follow-up macroinvertebrate bioassessment to document ecological change	August 2013
Task 7	Conduct stakeholder workshop to disseminate project results	March 2014
Task 8	Submit Draft and Final Report	March 2014 – June 2014

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 Scope of Work and the terms of this Agreement.

4. Rates

Rates for these services are as follows:

Table I – Cost Totals

	Year 1 (FY 11/12)	Year 2 (FY 12/13)	Year 3 (FY 13/14)
1. Salaries & Wages	\$2,802	\$41,251	\$41,251
2. Benefits	\$807	\$13,035	\$14,303
3. Travel	\$0	\$1,500	\$1,500
4. Supplies	\$305	\$4,834	\$4,834
5. Contractual	\$0	\$23,746	\$23,746
6. Minor Equipment	\$0	\$0	\$0
7. Indirect Costs @ 15%	\$587	\$12,655	\$12,845
Total Amount	\$4,500	\$97,021	\$98,479

ⓄBenefits include: Worker's Compensation and other benefits appropriate for title/classification

(NOTE: Student Interns are non-personnel employees with no benefits and shall be excluded from the percentage calculation of this line item.)

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

ⓄSupplies include: Miscellaneous sampling supplies, lab supplies, and reagents, this line item does not include any equipment with a unit acquisition cost of \$5,000 or more.

Ⓞ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

Year 1 (FY 11/12) Personnel	Monthly Salary	Number of Months	Percent Time	Total Amount
Brian Anderson (Specialist)	\$8,217	1	10%	\$821.70
Bryn Phillips (Specialist)	\$6,358	1	10%	\$635.77
Jenifer Voorhees (SRA II)	\$3,854	1	10%	\$385.40
Katie Siegler (Asst. Specialist)	\$3,811	1	10%	\$381.10
Lydia Jennings (Junior Specialist)	\$2,890	1	10%	\$289.00
Scott Katz (Junior Specialist)	\$2,890	1	10%	\$289.00
Total Personnel				\$2,801.97
Benefits				
Brian Anderson (27%)				\$221.86
Bryn Phillips (27%)				\$171.66
Jennifer Voorhees (40.2%)				\$154.93
Katie Siegler (27%)				\$102.90
Lydia Jennings (27%)				\$78.03
Scott Katz (27%)				\$78.03
Total Benefits				\$807.41
Total Personnel and Benefits				\$3,609.38

EXHIBIT B
Standard Agreement

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

Year 2 (FY 12/13) Personnel	Monthly Salary	Number of Months	Percent Time	Total Amount
Brian Anderson (Specialist)	\$8,217	1	50%	\$4,108.50
Bryn Phillips (Specialist)	\$6,358	2	50%	\$6,357.72
Jenifer Voorhees (SRA II)	\$3,854	2	50%	\$3,854.00
Katie Siegler (Asst. Specialist)	\$3,811	2	50%	\$3,811.00
Lydia Jennings (Junior Specialist)	\$2,890	8	50%	\$11,560.00
Scott Katz (Junior Specialist)	\$2,890	8	50%	\$11,560.00
Total Personnel				\$41,251.22
Benefits				
Brian Anderson (30.3%)				\$1,244.88
Bryn Phillips (30.3%)				\$1,926.39
Jennifer Voorhees (44.2%)				\$1,703.47
Katie Siegler (30.3%)				\$1,154.73
Lydia Jennings (30.3%)				\$3,502.68
Scott Katz (30.3%)				\$3,502.68
Total Benefits				\$13,034.83
Total Personnel and Benefits				\$54,286.05

EXHIBIT B
Standard Agreement

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

Year 3 (FY 13/14) Personnel	Monthly Salary	Number of Months	Percent Time	Total Amount
Brian Anderson (Specialist)	\$8,217	1	50%	\$4,108.50
Bryn Phillips (Specialist)	\$6,358	2	50%	\$6,357.72
Jennifer Voorhees (SRA II)	\$3,854	2	50%	\$3,854.00
Katie Siegler (Asst. Specialist)	\$3,811	2	50%	\$3,811.00
Lydia Jennings (Junior Specialist)	\$2,890	8	50%	\$11,560.00
Scott Katz (Junior Specialist)	\$2,890	8	50%	\$11,560.00
Total Personnel				\$41,251.22
Benefits				
Brian Anderson (33.3%)				\$1,368.13
Bryn Phillips (33.3%)				\$2,117.12
Jenifer Voorhees (48%)				\$1,849.92
Katie Siegler (33.3%)				\$1,269.06
Lydia Jennings (33.3%)				\$3,849.48
Scott Katz (33.3%)				\$3,849.48
Total Benefits				\$14,303.19
Total Personnel and Benefits				\$55,554.41

5. Cost Limitation

- A. The total amount of this Agreement shall not exceed \$200,000.00.
- 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 unless the subcontract(s) is identified in this Agreement.

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 will 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

CURRICULUM VITAE

Brian S. Anderson

Education

1982. B.S., Biological Sciences, Oregon State University (emphasis in marine ecology).

1987. M.A., Marine Biology, San Jose State University, Moss Landing Marine Laboratories (emphasis in phycology, marine ecology).

Professional Positions

1999- present. Research Specialist, University of California, Davis.

1997- 1999. Research Specialist, University of California, Santa Cruz. Project manager for State Water Resources Control Board Marine Bioassay Project and Bay Protection and Toxic Cleanup Program.

1991- 1997. Associate Research Specialist, University of California, Santa Cruz. Project manager for State Water Resources Control Board Marine Bioassay Project and Bay Protection and Toxic Cleanup Program.

1987- 1991. Assistant Research Specialist, University of California, Santa Cruz. Project manager for State Water Resources Control Board Marine Bioassay Project and Board Bay Protection and Toxic Cleanup Program.

1985-1987. Graduate Research Assistant, California Department of Fish and Game. Project manager for State Water Resources Control Board Marine Bioassay Project.

1984-1985. Seasonal Aid, California Department of Fish and Game. Commercial fishery monitoring.

1984-1985. Teaching Assistant, Moss Landing Marine Laboratories. Kelp forest and general marine ecology courses.

1979-1982. Greenhouse Technician, Oregon State University, Department of Horticulture. Greenhouse maintenance and plant care.

1980-1981. Laboratory Technician, Oregon State University, Department of Oceanography. Sorting benthic infauna for pollution studies.

EXHIBIT F
Standard Agreement

1977-1978. Research Assistant, California Institute of Technology, Kerckhoff Marine Laboratory. Field and laboratory research assistant on kelp forest ecology research project.

1973-1975. Student Assistant, California Institute of Technology, Kerckhoff Marine Laboratory. Field and Laboratory research assistant on kelp forest ecology research project.

Professional Affiliations

Society of Environmental Toxicology and Chemistry

Research Experience

2011 -ongoing . Co-lead researcher on the efficacy of LID practices for reduction of storm water contamination and toxicity in the City of Salinas. DWR Proposition 84 grant research.

2008 – ongoing. Co-lead researcher on long-term trend monitoring of sediment contamination and toxicity in California watersheds; Surface Water Ambient Monitoring Program/Stream Pollution Trends monitoring project.

2008-2010. Co-lead researcher on sources and causes of water and sediment toxicity in the Santa Maria River watershed. Grant Research for the Central Coast Regional Water Quality Control Board.

2007 – 2009. Co-Lead researcher on the effects of agriculture pesticides on three central California estuaries. Grant research for the California State Water Resources Control Board

2005 – on-going. Lead researcher on investigations of the efficacy of vegetated treatment systems and constructed wetlands for reducing toxicity associated with pesticide runoff. Grant research for the State Water Resources Control Board and the Central Coast Regional Water Quality Control Board, in cooperation with the Monterey County Resource Conservation District.

2004 –2007. Lead researcher on investigations of the effects of dispersants on toxicity of oil to Chinook salmon smolts. Grant research for National Oceanic and Atmospheric Administration and The California Department of Fish and Game.

2004-2006 – Lead researcher on evaluation of marine and freshwater sediment toxicity identification evaluation methods for application to the TMDL process. Grant research for the Water Environment Research Federation.

EXHIBIT F
Standard Agreement

2003 – 2005. Lead researcher on San Diego sediment TMDL investigations. Grant research for the San Diego Regional Water Quality Control Board.

2002 – 2005. Lead researcher on extent and causes of storm water toxicity in coastal Monterey Bay communities. Cooperative grant research project for the California State Water Resources Control Board and the Monterey Bay National Marine Sanctuary.

2000 – 2001: Comparison of laboratory and *in situ* exposures using marine amphipods. Grant research for Calif. Dept Fish and Game.

1999-2002: Coastal monitoring as part of EPA Environmental Monitoring and Assessment Program (EMAP).

1998-present Lead researcher on monitoring studies of pesticide runoff associated with ambient toxicity in the Salinas River and associated drainages. Grant research for California State Water Resources Control Board.

1997-1998. Lead researcher on study of the chronic effects of nickel discharged into San Francisco Bay on three marine species indigenous to California. Grant Research for City of San Jose.

1995- 1997. Lead researcher on investigations of toxicity associated with flux of contaminants from sediments into overlying waters. Grant research for California Department of Fish and Game.

1995-present. Lead researcher on application of Toxicity Identification Evaluations (TIEs) for investigating causes of sediment associated toxicity to marine organisms. Grant Research for San Francisco Regional Water Quality Control Board, San Francisco Estuary Institute.

1994-1996: Lead researcher on monitoring studies of pesticide runoff associated with ambient toxicity in the Pajaro River and associated drainage. Grant research for California State Water Resources Control Board.

1994-1998. Lead researcher for monitoring and surveillance program on the effects of contaminated sediments on the early life stages of marine and estuarine species. Grant research for California State Water Resources Control Board's Bay Protection and Toxic Cleanup Project and NOAA's Status and Trends Program.

1990-1997. Lead researcher on the effects of contaminated sediments on the early life stages of marine and estuarine species. Grant research for the San Francisco Regional Water Quality Control Board.

1985-2005. Lead researcher on the effects of point and non-point source pollution on early life stages of kelp (*Macrocystis pyrifera*), red abalone (*Haliotis rufescens*), mysid shrimp

EXHIBIT F
Standard Agreement

(*Holmesimysis costata*), and topsmelt (*Atherinops affinis*). Grant research for the California State Water Resources Control Board.

1986. Project scientist on study of the effects of sea otters *Enhydra lutris* on bivalve communities in the Kodiak Island archipelago, Alaska. Grant research for the US Fish and Wildlife Service.

1985-1986. Lead researcher on the effects of sea otter *Enhydra lutris* predation on bivalve populations in the Elkhorn Slough, California. Grant research for NOAA.

1983-1985. Lead researcher on ecology of the intertidal alga *Prasiola meridionalis*. Thesis research.

1984. Project scientist on the effects of El Nino on kelp forest algal succession in the Channel Islands.

1977-1978. Project scientist on laboratory and subtidal research on the biology and ecology & 1973-1975 of kelp (*Macrocystis pyrifera*) and kelp forests.

Publications

77. Van Scoy, April; Voorhees, Jennifer ; Anderson, Brian; Phillips, Bryn; Tjeerdema, Ron. In review. Characterization of Dissolved Hydrocarbon Fractions and Their Potential Influence on Bioaccumulation. Environmental Toxicology and Chemistry

76. Anderson, B.S. et al. In Prep. Relative effects of weathered Prudhoe Bay crude oil and dispersed oil on topsmelt embryo development (*Atherinops affinis*).

75. Anderson, B.S. et al. In Prep. Impacts of Pyrethroid and Organophosphate Pesticides in a Central California Estuary.

74. VanScoy, A.R., Anderson, B.S., Phillips, B.M., Voorhees, J.L., McCann, M., De Haro, H., Martin, M., McCall, J., Todd, C.R., Crane, D., Sowby, M.L., Tjeerdema, R.S.. In Press. NMR-Based Characterization of the Acute Metabolic Effects of Weathered Crude and Dispersed Oil in Spawning Topsmelt and Their Embryos. Ecotox. Environ. Safety.

73. Phillips, B.M., Anderson, B.S., Hunt, J.W., Siegler, K., Vorhees, J.P., Tjeerdema, R.S., McNeil, K. In Press. Pyrethroid and organophosphate pesticide-associated toxicity in two coastal watersheds (California, USA). Environ Toxicol Chem.

72. Anderson, B.S. 2011 Treatment of agriculture runoff with enzyme and vegetation removes pesticides and associated toxicity. Outlooks on Pest Management 22: 223-225.

EXHIBIT F
Standard Agreement

71. Diamond, J. Denton, D., **Anderson, B.**, Phillips, B. 2011. It is time for changes in the analysis of whole effluent toxicity data. *Integrated Environ. Assess. and Manag.*
70. **Anderson, BS**, Phillips, BM, Hunt, JW, Largay, B, Shihadeh, R, Berretti, M, Tjeerdema, RS. 2011. Pesticide and toxicity reduction using an integrated vegetated treatment system. *Environ Toxicol Chem.* 30:1036-1043.
69. Phillips BM, **Anderson BS**, Voorhees JP, Hunt JW, Holmes RW, Mekebri A, Connor V, Tjeerdema RS. 2010. The contribution of pyrethroid pesticides to sediment toxicity in four urban creeks in California, USA. *Journal of Pesticide Science.* 35: 302-309.
68. Place, B, **Anderson, B**, Mekebri, A, Furlong, E, Gray, J, Tjeerdema, R, Fields, J. 2010. A role for analytical chemistry for understanding of the occurrence, fate, and effects of Corexit oil dispersants. *Environ. Sci. Technol.* 44. 6018-6026.
67. Van Scoy, AR, Lin, C-Yu, **Anderson, BS**, Phillips, BM, Martin, MJ, McCall, J, Todd, CR, Crane, D, Sowby, ML, Viant, MR, Tjeerdema, RS. 2010. Metabolic responses produced by crude versus dispersed oil in chinook salmon pre-smolts via NMR-based metabolomics. *Ecotoxicology and Environmental Safety* 73:710-717.
66. **Anderson, BS**, Phillips, BM, Hunt, JW, Clark, SW, Voorhees, JP, Tjeerdema, RS, Casteline, J, Stewart, M, Crane, D, Mekebri, 2010. Evaluation of methods to determine causes of sediment toxicity in San Diego Bay, California, USA. *Ecotoxicology and Environmental Safety*, 73:534-540.
65. Lin, CY, **Anderson, BS**, Phillips, BM, Peng AC, Clark SL, Voorhees JP, Hsieh F, Crane D, Viant MR, Tjeerdema RS. 2009. Metabolic Effects of Crude and Dispersed oil on Chinook Salmon Smolts (*Oncorhynchus tshawytscha*). *Aquat. Toxicol.* 95: 230-238.
64. **Anderson, BS**, Arenella-Parkerson, D, Phillips, BM, Tjeerdema, RS, Crane, D. 2009. Effects of dispersed and un-dispersed oil on developing topmelt embryos. *Environ Poll* 157: 1058-1061.
63. Holmes RW, **Anderson BS**, Phillips BM, Hunt JW, Crane DB, Mekebri A, Blondina G, Nguyen L, Connor V. 2008. Statewide Investigation of the Role of Pyrethroid Pesticides in Sediment Toxicity in California's Urban Waterways. *Environ Sci Technol.* 42(18): 7003-7009.
62. Hunt, JW, **Anderson, BS**, Phillips, BM, Tjeerdema, RS, Largay, B, Hanson, E, Beretti, M, Bern A. 2008. Use of toxicity identification evaluations in determining the pesticide mitigation effectiveness of on-farm vegetated treatment systems. *Environ Poll.* 156: 348-358.
61. Phillips, BM, **Anderson, BS**, Hunt, JW, Clark, SW, Voorhees, JP, Tjeerdema, RS, Casteline, J, Stewart, M, Crane, D, Mekebri, A. 2009. Evaluation of Phase II Toxicity

EXHIBIT F
Standard Agreement

Identification Evaluation Methods for Freshwater Whole Sediment and Interstitial Water.
Chemosphere 74:648-653.

60. Greenstein, D, Bay, S, **Anderson, BS**, Chandler, GT, Farrar, JD, Keppler, C, Phillips, BM, Ringwood, A, Young, D. 2008. Comparison of methods for evaluating acute and chronic toxicity in marine sediments. Environ Toxicol Chem. 27(4) :933-942

59 Wheelock, CE, Phillips, BM, **Anderson, BS**, Miller, JL, Miller, M, Hammock, B. 2008. Applications of carboxylesterase activity in Toxicity Identification Evaluations (TIEs) and environmental monitoring. Rev Environ Contam Toxicol 195: 117 -178.

58. **Anderson, BS**, Phillips, BM, Hunt, JW, Vorhees, J, Clark, S, Tjeerdema, RS. 2008. Recent advances in sediment toxicity identification evaluation methods emphasizing pyrethroid pesticides. In: Gan, J-G, Hendley, P, Spurlock, F, Weston, D. (eds), Synthetic Pyrethroids: Occurrence and Behavior in Aquatic Environments. American Chemical Society Books, Washington, DC (invited). 481 pp.

57. **Anderson, BS**, Phillips, BM, Vorhees, J, Clark, S, Hunt, JW, Lowe, S, Tjeerdema, RS. 2008. Relative sensitivities of toxicity test protocols with the amphipods *Eohaustorius estuarius* and *Ampelisca abdita* to sediment spiked with copper, chlorpyrifos, fluoranthene, bifenthrin, cypermethrin, and permethrin. Ecotox and Environ Safety 69: 24-31.

56. Phillips , BM, **Anderson, BS**, Hunt, JW, S, Tjeerdema. 2007. Causes of Water Toxicity to *Hyalella azteca* in the New River, California (USA). Environ Toxicol Chem 26: 1074-1079.

55. **Anderson, BS**, Hunt, BM, Thompson, B, Lowe, S, Taberski, K, Carr, RS. 2007. Patterns and trends in sediment toxicity in the San Francisco estuary. Env. Res. 105: 145-155.

54. Hunt, JW, **Anderson, BS**, Phillips, BM, Tjeerdema, RS, Richard, N, Connor, N, Worcester, K, Angelo, M, Bern, A, Fulfrost, B, Mulvaney, D. 2006. Spatial relationships between water quality and pesticide applications in agricultural watersheds. Environ Monit Assess. 121:245-262.

53. Phillips , BM, **Anderson, BS**, Hunt, JW, Huntley, S, Tjeerdema, RS, Kapellas, N, Worcester, K. 2006. Solid-phase sediment toxicity identification evaluation in an agricultural stream. Environ Toxicol Chem. 25: 1671-1676.

52. **Anderson, BS**, Phillips, BM, Hunt, JW, Richard, N, Connor, V., Tjeerdema, RS. 2006 Evidence of pesticide impacts in the Santa Maria River watershed (California, USA). Environ. Toxicol. Chem 25:1160 – 1170.

EXHIBIT F
Standard Agreement

51. **Anderson, BS**, Phillips, BM, Hunt, JW, Richard, N, Connor, V., Tjeerdema, RS. 2006. Identifying primary stressors impacting macroinvertebrates in the Salinas River (California, USA): relative effects of pesticides and suspended particles. *Environmental Poll.* 141: 402-408.
50. Hunt JW, **Anderson BS**, Phillips BM. 2005. Toxicity identification evaluation of solid-phase sediment from San Francisco Bay, California, USA. Chapter 6.27. In: Norberg-King T, Ausley L, Burton D, Goodfellow W, Miller J, Waller WT (eds.) *Toxicity Reduction Evaluations and Toxicity Identification Evaluation (TIE) for Effluent, Ambient Waters and Other Aqueous Media*. SETAC Press, Pensacola, FL. Pp 319-324.
49. Hunt JW, **Anderson BS**, Phillips BM. 2005. Agricultural drain water toxicity mitigated by pH adjustment. Chapter 6.28. In: Norberg-King T, Ausley L, Burton D, Goodfellow W, Miller J, Waller WT (eds.) *Toxicity Reduction Evaluations and Toxicity Identification Evaluation (TIE) for Effluent, Ambient Waters and Other Aqueous Media*. SETAC Press, Pensacola, FL. Pp 324-327.
48. Phillips, BM, Nicely, PA, Hunt, JW, **Anderson, BS**, Tjeerdema, RS, Palmer, FH. 2005. Tolerance of five west coast marine organisms to ammonia. *Bull Environ Contam Toxicol.* 75: 23-27.
47. Phillips, BM, **Anderson, B.S.**, Hunt, J.W., Nicely, PA, Kosaka, R, de Vlaming, V, Connor, V, Richard, N, Tjeerdema, RS. 2004. *In situ* water and sediment toxicity in an agricultural watershed. *Environ. Toxicol. Chem.* 23: 435-442.
46. **Anderson, B.S.**, Hunt, J.W., Phillips, B.M., Nicely, PA, Martin, M, Tjeerdema, RS. 2004. Comparison of *in situ* and laboratory toxicity tests with the estuarine amphipod *Eohaustorius estuarius*. *Arch Environ Contam Toxicol.* 46: 52-60.
45. Phillips, BM, **Anderson, BS**, Hunt, JW, Thompson, B, Lowe, S, Hoenicke, R, Tjeerdema, RS. 2003. Causes of sediment toxicity to *Mytilus galloprovincialis* in San Francisco Bay, California. *Arch. Environ Contam. Toxicol.* 45: 486-491.
44. **Anderson, B.S.**, Hunt, J.W., Phillips, B.M., Nicely, PA, de Vlaming, V, Connor, V, Richard, N, Tjeerdema, RS. 2003. Integrated assessment of the impacts of agricultural drainwater in the Salinas River (California, USA). *Environ. Pollution* 124: 523-532.
43. **Anderson, B.S.**, Hunt, J.W., Phillips, B.M., Nicely, PA, Gilbert, KD, de Vlaming, V, Connor, V, Richard, N, Tjeerdema, RS. 2003. Ecotoxicologic impacts of agriculture drainwater in the Salinas River (California, USA). *Environ. Toxicol. Chem.* 22: 2375-2384
42. Phillips, BM, Nicely, PA, Hunt, JW, **Anderson, BS**, Tjeerdema, RS, Palmer, SE, Palmer, FH, Puckett, HM. 2003. Toxicity of cadmium-copper-nickel-zinc mixtures to larval purple sea

EXHIBIT F
Standard Agreement

urchins (*Strongylocentrotus purpuratus*) and bay mussels (*Mytilus galloprovincialis*). Bull. Environ Contam. Toxicol. 70: 592-599.

41. Hunt, JW, **Anderson, BS**, Phillips, BM, Nicely, PA, Tjeerdema, Puckett, HM, Stephenson, M, Worcester, K, deVlaming, V. 2003. Ambient toxicity due to chlorpyrifos and diazinon in a Central California Watershed. Environ Monit Assess. 82: 83-112.
40. Hunt, JW, **Anderson, BS**, Phillips, BM, Tjeerdema, RS, Puckett, HM, Stephenson, M, Tucker, DW, Watson, D. 2002. Acute and chronic toxicity of nickel to marine organisms: implications for water quality criteria. Environ Toxicol Chem. 21: 2423-2430.
39. Winger PV, Albrecht, B, **Anderson, BS**, Bay, SM, Bona, F, Stephenson, GL. 2003. Comparison of Porewater and Solid-Phase Sediment Toxicity Tests. In: Carr, RS, Nipper, M (eds): *Pore water toxicity testing: biological chemical and ecological considerations – methods, applications, and recommendations for future areas of research*. SETAC Press, Pensacola, FL Pp 37-58.
38. Bay, SM, **Anderson, BS**, Carr, RS. 2003. Relative performance of porewater and solid-phase toxicity tests: Characteristics, causes, and consequences. In: Carr, RS, Nipper, M (eds): *Pore water toxicity testing: biological chemical and ecological considerations – methods, applications, and recommendations for future areas of research*. SETAC Press, Pensacola, FL. Pp 11-34.
37. **Anderson, BS**, de Vlaming, V, Larsen, K, Deanovic, L, Birosik, S, Smith, DJ, Hunt, JW, Tjeerdema, RS. 2002. Causes of toxicity in the Calleguas Creek watershed of southern California. Environ Monit Assess. 78: 131-151.
36. Fairey, R., E.R. Long, C.A. Roberts, **B.S. Anderson**, B.M. Phillips, J.W. Hunt, H.R. Puckett, C.J. Wilson, G. Kapahi, M. Stephenson. 2001. A recommended method for calculation of sediment quality guideline quotients. Environ Toxicol Chem 20: 2276-2286.
35. Hunt, J.W., **B.S. Anderson**, B.M. Phillips, J. Newman, R. Tjeerdema, R. Fairey, H.M. Puckett, M. Stephenson, R.W. Smith, C.J. Wilson, and K.M. Taberski. 2001. Evaluation and use of sediment toxicity reference sites for statistical comparisons in regional assessments. Environ Toxicol Chem. 20: 1266-1275.
34. Hunt, J.W., **B.S. Anderson**, B.M. Phillips, R. Tjeerdema, K.M. Taberski, C. J. Wilson, H. M. Puckett, M. Stephenson, R. Fairey, J. Oakden . 2001. A large-scale categorization of sites in San Francisco Bay, USA based on the sediment quality triad, toxicity identification evaluations, and gradient studies. Environ Toxicol Chem. 20: 1252-1265.
33. Phillips, B.M., J.W. Hunt, **B.S. Anderson**. 2001. Statistical Significance of Sediment Toxicity Test Results: Threshold Values Derived by the Detectable Significance Approach. Environ. Toxicol. and Chem. 20: 371-373.

EXHIBIT F
Standard Agreement

32. **Anderson, B.S.**, Hunt, J.W., Phillips, B.M., Fairey, R., J., Oakden, J.M., Puckett, H.M., Stephenson, M., Tjeerdema, R.S., Long, E.R., Wilson, C.J., and Lyons, M. 2001. Sediment Quality in Los Angeles Harbor: A triad assessment. *Environ. Toxicol. Chem.* 20(2): 359-370.
31. **Anderson, B.S.**, Hunt, J.W., Phillips, B.M., Fairey, R., Newman, J., Puckett, H.M., Stephenson, M., Taberski, K.T. and Tjeerdema, R.S. 2001. Influence of sample manipulation on contaminant flux and toxicity at the sediment-water interface. *Mar. Environ. Res.* 51: 191-211.
30. **Anderson, B.S.**, Hunt, J.W., Phillips, B.M., Fairey, R., J., Puckett, H.M., Stephenson, M., Tjeerdema, R.S., and Martin, M. 2000. Ecotoxicological change at a remediated Superfund site in San Francisco Bay. *Environ. Toxicol. Chem.* 19(4): 879-887.
29. **Anderson, B.S.**, and Foster, M.S. 1999. Factors controlling the distribution of the splash zone alga *Prasiola meridionalis* (Meneghini). *Phycologia* 38(5), 349-355.
28. Hunt, J.W., **Anderson, B.S.**, Phillips, B.M., Tjeerdema, R.S., Puckett, H.M., and deVlaming, V. 1999. Patterns of aquatic toxicity in an agriculturally dominated coastal watershed of California. *Agricul. Ecosyst. Environ.* 75: 75-91.
27. Thompson, B., **Anderson, B.**, Hunt, J., Taberski, K., and B. Phillips. 1999. Relationships between sediment toxicity and contamination in San Francisco Bay. *Mar. Environ. Res.* 48:285-309.
26. Fairey, R., Roberts, C., Jacobi, M., Lamerdin, S, Clark, R., Downing, J., Long, E., Hunt, J., **Anderson, B.**, Newman, J., Stephenson, M., Wilson, C.J. 1998. Assessment of sediment toxicity and chemical concentrations in the San Diego Bay region, California. *Environ. Toxicol. and Chem.* 17(8): 1570-1581.
25. **Anderson, B.S.**, Hunt, J.W., Phillips, B.M., Tudor, S., Fairey, R., Newman, J., Puckett, H.M., Stephenson, M., Long, E.R., Wilson, C.J., and Tjeerdema, R.S. 1998. Comparison of marine sediment toxicity test protocols for the amphipod *Rhepoxynius abronius* and the polychaete worm *Nereis (Neanthes) arenaceodentata*. *Environ. Toxicol. and Chem.* 17(5): 859-866.
24. Phillips, B.M., **Anderson, B.S.**, and Hunt, J.W. 1998. Spatial and temporal variation in results of sea urchin (*Strongylocentrotus purpuratus*) toxicity tests with zinc. *Environ. Toxicol. and Chem.* 17(3):453-459.
23. Chapman, P.M., **Anderson, B.S.**, Carr, R.S., Engle, V., Haverland, P., Hameedi, J., Hyland, J., Ingersoll, C., Long, E., Rodgers, J., Sibley, S., Smith, P., Swartz, R., Thompson, B., Windom, H. 1997. General guidelines for using the Sediment Quality Triad (SQT). *Mar. Poll. Bull.* 34(6): 368-372.

EXHIBIT F
Standard Agreement

22. Hunt, J.W., **Anderson, B.S.**, Englund, M.E., and Phillips, B.M. 1997. Recent advances in microscale toxicity testing with marine molluscs. In: Wells, P.G., Lee, K., and C. Blaise (eds.) *Microscale Aquatic Toxicology- Advances, Techniques and Practice*. Lewis Publishers, Boca Raton, FL. pp 423-436.
21. **Anderson, B.S.**, Hunt, J.W., and Piekarski, W.J. 1997. Recent advances in toxicity testing methods using kelp gametophytes. In: Wells, P.G., Lee, K., and C. Blaise (eds.) *Microscale Aquatic Toxicology- Advances, Techniques and Practice*. Lewis Publishers, Boca Raton, FL. pp 255-268.
20. Phillips, B.M., **Anderson, B.S.**, and Hunt, J.W. 1997. Measurement and distribution of interstitial and overlying water ammonia and hydrogen sulfide in sediment toxicity tests. *Mar. Environ. Res.* 44(2): 117-126.
19. Hunt, J.W., **Anderson, B.S.**, Turpen, S.L., Englund, M.A. and Piekarski, W.J. 1997. Precision and sensitivity of a seven-day growth and survival toxicity test using the West Coast marine mysid crustacean *Holmesimysis costata*. *Environ. Toxicol. Chem.* 16, 824-834.
18. Chapman, G.A., **Anderson, B.S.**, Bailer, A.J., Baird, R.B., Berger, R.B., Burton, D.T., Denton, D.L., Goodfellow, W.L., Heber, M.A., McDonald, L.L., Norberg-King, T.J., and Ruffier, P.J. 1996. Methods and Appropriate Endpoints. In: *Whole Effluent Toxicity Testing: An Evaluation of Methods and Prediction of Receiving System Impacts*. (Eds) Grothe, D.R., Dickson, K.L., Reed-Judkins, D.K. SETAC Press, Pensacola, FL. p 41-78.
17. Conroy, P.T., Hunt, J.W., and **Anderson, B.S.** 1996. Validation of a short-term toxicity test endpoint by comparison with longer-term effects on larval red abalone *Haliotis rufescens*. *Environ. Tox. and Chem.* 15 (7), 1245-1250.
16. **Anderson, B.S.**, Hunt, J.W., Hester, M. and Phillips, B.M. 1996. Assessment of sediment toxicity at the sediment-water interface. In: G.K. Ostrander (ed.) *Techniques in Aquatic Toxicology*. Lewis Publishers, Ann Arbor, MI.
15. **Anderson, B.S.**, Hunt, J.W., Piekarski, W.J., Phillips, B.M., Englund, M.A., Tjeerdema, R.S. and Goetzl, J.D. 1995. Influence of salinity on copper and azide toxicity to larval topsmelt *Atherinops affinis* (Ayres). *Arch. Environ. Contam. Toxicol.* 29, 366-372.
14. Turpen, S.L., Hunt, J.W., **Anderson, B.S.** and Pearse, J.S. 1994. Population structure, growth, and fecundity of the kelp forest mysid *Holmesimysis costata* in Monterey Bay, California. *J. Crustac. Biol.* 14(4), 657-664.
13. **Anderson, B.S.**, Hunt, J.W., McNulty, H.R., Turpen, S.L. and Martin, M. 1994. Off-season spawning and factors influencing toxicity test development with topsmelt *Atherinops affinis*. *Environ. Toxicol. Chem.* 13(3), 479-485.

EXHIBIT F
Standard Agreement

12. McNulty, H.R., **Anderson, B.S.**, Hunt, J.W. and Singer, M.M. 1994. Age-specific toxicity of copper to larval topsmelt *Atherinops affinis*. *Environ. Toxicol. Chem.* 13(3), 487-492.
11. Middaugh, D.P. and **Anderson, B.S.** 1993. Utilization of topsmelt, *Atherinops affinis*, in environmental toxicology studies along the Pacific coast of the United States. *Rev. Environ. Toxicol.* 5, 1-49 (invited).
10. Thursby, G.B., **Anderson, B.S.**, G.E. Walsh and Steele, R.L. 1993. A review of the current status of marine algal toxicity testing in the United States. *Environmental Toxicology and Risk Assessment*, ASTM STP 1179, Wayne G. Landis, Jane S. Hughes, and Michael A. Lewis, Eds, American Society for Testing and Materials, Philadelphia, pp 362-377 (invited).
9. Hunt, J.W. and **Anderson, B.S.** 1993. From research to routine: A review of toxicity testing with marine molluscs. *Environmental Toxicology and Risk Assessment*, ASTM STP 1179, Wayne G. Landis, Jane S. Hughes, and Michael A. Lewis, Eds, American Society for Testing and Materials, Philadelphia, pp 320-339 (invited).
8. Kvitek, R.G., Oliver, J.S., DeGange, A.R. and **Anderson, B.S.** 1992. Changes in Alaskan soft-bottom prey communities along a gradient in sea otter predation. *Ecology* 73(2), 413-428.
7. Middaugh, D.P., **Anderson, B.S.** and Hemmer, M. 1992. Laboratory spawning of topsmelt *Atherinops affinis* with notes on culture and growth of larvae. *Environ. Tox. and Chem.* 1 (3), 393-400.
6. **Anderson, B.S.**, Middaugh, D.P., Hunt, J.W. and Turpen, S.L. 1991. Copper toxicity to sperm, embryos, and larvae of topsmelt *Atherinops affinis*, with notes on induced spawning. *Mar. Environ. Res.* 31, 17-35.
5. **Anderson, B.S.**, Hunt, J.W., Turpen, S.L., Coulon, A.R. and Martin, M. 1990. Copper toxicity to microscopic stages of *Macrocystis pyrifera*:: interpopulation comparisons and temporal variability. *Mar. Ecol. Prog. Ser.* 68 (1-2), 147-156.
4. Hunt, J.W. and **Anderson, B.S.** 1989. Sublethal effects of zinc and municipal sewage effluents on larvae of the red abalone *Haliotis rufescens*. *Mar. Biol.* 101 (4): 545-552.
3. Martin, M., Hunt, J.W., **Anderson, B.S.**, Turpen, S.L., and Palmer, F.H. 1989. Experimental evaluation of the mysid *Holmesimysis costata* as a test organism for effluent toxicity testing. *Environ. Tox. and Chem.* 8: 1003-1012.
2. **Anderson, B.S.**, and Hunt, J.W. 1988. Bioassay methods for evaluating the toxicity of heavy metals, biocides, and sewage effluent using microscopic stages of giant kelp *Macrocystis pyrifera* (Agardh): A preliminary report. *Mar. Environ. Res.* 26: 113-134.

EXHIBIT F
Standard Agreement

1. Kvitek, R.G., Fukuyama, A.L., **Anderson, B.S.** and Grimm, B. 1988. Sea otter foraging on deep-burrowing bivalves in a California coastal lagoon. *Mar. Biol.* 98, 157-167.

Reports

Anderson, BS, Hunt, JW, Markiewicz, D, Larson, K. Summary of toxicity in California surface waters – 2001 – 2010. Final technical report, California State Water Resources Control Board, Sacramento, California.

Tjeerdema, RS, VanScoy, A., **Anderson, BS**, Phillips, BM, Voorhees, J. 2010. Relative toxicity of weathered Prudhoe Bay crude oil and dispersed oil on spawning topmelt (*Atherinops affinis*). Final report to the Office of Spill Prevention and Response, California Department of Fish and Game.

Anderson, BS, Phillips, BM, Hunt, JW, Siegler, CS, Voorhees, J, Kuivila, K, Smalling, K, Adams, M. 2010. Watershed-scale Evaluation of Agricultural BMP Effectiveness in Protecting Critical Coastal Habitats: Final Report on the Status of Three Central California Estuaries. Central California Regional Water Quality Control Board.

Siegler, CS, Phillips, BM, **Anderson, BS**, Hunt, JW, Voorhees, J. 2010. Screening of Effects of Endocrine Disrupting Compounds with the 21-day Fathead Minnow Reproduction Assay: Evaluation of Wet and Dry Season Effects. Final Report to the Central Coast Long-term Environmental Assessment Network (CCLEAN).

Phillips, BM, **Anderson, BS**, Hunt, JW, Siegler, CS, Voorhees, J, McNeill, K. 2010. Santa Maria River Watershed and Oso Flaco Creek watershed TMDL monitoring study. Final Report to the Central Coast Regional Water Quality Control Board, San Luis Obispo, CA.

Anderson, BS, Phillips, BM, Hunt, JW, Largay, B, Shihadeh, R, Berretti, M. 2008. Pesticide and toxicity reduction using vegetated treatment systems and Landguard OP-A. Final technical report to Monterey County Resource Conservation District and Central Coast Regional Water Quality Control Board. 70 pp.

Largay BG, Los Huertos M, Shihadeh R, Robins P, Beretti M, **Anderson BS**, Phillips BM, Hunt JW. 2008. Vegetated Treatment Systems at the Edge of Working Farms: A Tool to Reduce the Yield of Nutrients, Pesticides and Sediment, Monterey County, California. Central Coast Regional Water Quality Control Board, San Luis Obispo, CA. 153 pp.

Phillips, BM, **Anderson, BS**, Lowe, S, Hunt, JW. 2008. Using Toxicity Identification Evaluation (TIE) Methods to Investigate Causes of Sediment Toxicity to Amphipods. Final Technical Report, San Francisco Estuary Institute.

EXHIBIT F
Standard Agreement

Anderson, BS, Hunt, JW, Phillips, BM, Tjeerdema, RS. 2007. Navigating the TMDL Process: Sediment Toxicity. Final technical report (02-WSM-2) to the Water Environment Research Foundation (WERF), Alexandria, VA.

Hunt, J, **Anderson, B**, Phillips, B, Largay, B. 2007. Effectiveness of Agricultural Management Practices in Reducing Concentrations of Pesticides Associated with Toxicity to Aquatic Organisms; Data Summary and Final Report. California Water Quality Control Board, Central Coast Region.

Tjeerdema, RS, VanScoy, A, **Anderson, BS**, Phillips, BM, Crane, D, McCall, J. 2008. Acute and chronic effects of dispersed oil on Chinook Salmon pre-smolts (*O. tshawytscha*). Final Report. California Department of Fish and Game – Office of Spill Prevention and Response. Sacramento, CA. 79 pp.

Tjeerdema, RS, Lin, C-Y, **Anderson, BS**. 2006. Acute and chronic effects of dispersed oil on Chinook Salmon smolts (*O. tshawytscha*). Final Report. California Department of Fish and Game – Office of Spill Prevention and Response. Sacramento, CA. 52 pp.

Tjeerdema, RS, Lin, C-Y, **Anderson, BS**, Sowby, M. 2006. Acute and chronic effects of dispersed oil on Chinook Salmon smolts (*O. tshawytscha*). Coastal Response Research Center, UNH. 52 pp.

Lowe, S, **Anderson, BS**, Phillips, BM. 2006. Investigations of sources and effects of pyrethroid pesticides in watersheds of the San Francisco Estuary. Draft final report - PRISM GRANT: 041355520. State Water Resources Control Board, SWRCB, Sacramento, CA.

Anderson, BS, Hunt, JW, Phillips, BM, Bern. 2006. Water and sediment quality in four central coast watersheds: Chualar Creek, Watsonville Slough, Pacheco Creek, and Uvas Creek. Final Technical Report, Central Coast Regional Water Quality Control Board. 58 pp.

Anderson, BS, Hunt, JW, Phillips, BM, Tjeerdema, RS. 2006. Navigating the TMDL Process: Sediment Toxicity. Draft Report- 02-WSM-2. Water Environment Research Federation. 181 pp.

Anderson, BS, Phillips, BM, Hunt, JW. 2005. Sediment quality assessment study at the B Street/Broadway Piers, Downtown Anchorage, and Switzer Creek, San Diego Bay, California. Phase II Final Report, Temporal variability, causes of impacts, and likely sources of contaminants of concern. Technical report, Regional Water Quality Control Board, San Diego, CA.

EXHIBIT F
Standard Agreement

Hunt JW, **Anderson BS**, Phillips BM, Tjeerdema RS. 2005. Salinas River Sediment Toxicity Survey. California State Water Resources Control Board and Central Coast Regional Water Quality Control Board.

Anderson, BS, Nicely, PA, Phillips, BM, Hunt, JW. 2004. Sediment quality assessment study at the B Street/Broadway Piers, Downtown Anchorage, and Switzer Creek, San Diego Bay, California. Technical report, Regional Water Quality Control Board, San Diego, CA. 142 pp w/Appendices.

Phillips, BM, Nicely, PA, **Anderson, BS**, Hunt, JW, Tjeerdema, RS, Beegan, B, Palmer, FH. 2004. Marine Bioassay Project Twelfth Report. State Water Resources Control Board, Sacramento, CA. 42 pp w/Appendices.

Anderson, BS, Ogle, S, Lowe, S. 2003. Ten years of testing for the effects of estuary contamination. In: Pulse of the Estuary - Monitoring and Managing Contamination in the San Francisco Estuary. Summary Report. San Francisco Estuary Institute, pp 27-31

Phillips, BM, Nicely, PA, **Anderson, BS**, Hunt, JW, Tjeerdema, RS, Beegan, B, Palmer, FH. 2003. Marine Bioassay Project Eleventh Report. State Water Resources Control Board, Sacramento, CA. 55 pp w/Appendices.

Anderson, BS, Nicely, PA, Hunt, JW, Gilbert, KD, Kosaka, RA, Phillips, BM. 2001. Guidance on Application of Freshwater and Marine Aquatic Toxicity Tests for Hazard Assessment in California Waters. Technical Report to the Office of Environmental Health Hazard Assessment, California Environmental Protection Agency. pp 165.

Anderson BS, Phillips, BM, Hunt, and Sericano, J. 2000. Investigations of chemicals associated with amphipod mortality at two regional monitoring program stations. Technical report to the San Francisco Estuary Institute – Regional Monitoring Program.

Phillips, BM, **Anderson BS**, Hunt, JW. 2000. Investigation of causes of sediment toxicity in the San Francisco Bay/Delta. Technical report to the San Francisco Estuary Institute – Regional Monitoring Program.

Phillips, BM, Nicely, PA, Hunt, JW, **Anderson, BS**, Tjeerdema, R, Palmer, SE, Palmer, FH. 2000. Marine Bioassay Project Tenth Report: Metal, Ammonia, Sediment, and artificial salt toxicity evaluations on marine test organisms. Final Report to the State Water Resources Control Board, Sacramento, CA. pp 127.

Anderson BS, Phillips, BM, Hunt, JW, Stephenson, MD, Puckett, HM, Reeve, R, and Palmer, FH. 1998. Marine Bioassay Ninth Project. Final Report to the State Water Resources Control Board, Sacramento, CA. pp 50.

EXHIBIT F
Standard Agreement

Anderson, BS, Hunt, BM, Phillips, S, Newman, J, Tjeerdema, RS, Fairey, R, Oakden, J, Wilson, CJ, Kapahi, G, Stephenson, MD, Puckett, Lyons, M, Birosik, S. 1998. Chemistry, toxicity and benthic community conditions in selected sediments of the Los Angeles Region. Final Report, State Water Resources Control Board, Sacramento California. pp 232.

Phillips, BM, **Anderson, BS**, Hunt, JW, Tjeerdema, RS, Fairey, R, Oakden, J, Wilson, CJ, Kapahi, G, Stephenson, MD, Puckett, Dawson, S. 1998. Chemistry, toxicity and benthic community conditions in selected sediments of the Santa Ana Region. Final Report, State Water Resources Control Board, Sacramento California. pp 100.

Hunt, J.W., **Anderson, B.S.**, Phillips, B.M., Newman, J., Tjeerdema, R.S., Stephenson, M., Puckett, H.M., Fairey, R., Smith, RW, and Taberski, K. 1998b. Evaluation and use of sediment reference sites and toxicity tests in San Francisco Bay. Bay Protection and Toxic Cleanup Program Final Technical Report. State Water Resources Control Board, Sacramento, CA. pp 132.

Hunt, J.W., **Anderson, B.S.**, Phillips, B.M., Newman, J., Tjeerdema, R.S., Taberski, K, Wilson, C.J., Stephenson, M., Puckett, H.M., Fairey, R., and Oakden, J. 1998a. Sediment Quality and Biological Effects in San Francisco Bay. Bay Protection and Toxic Cleanup Program Final Technical Report. State Water Resources Control Board, Sacramento, CA. pp 188.

Fairey, RS, Downing, J, Roberts, C, Landrau, E, Hunt, JW, **Anderson, BS**, Wilson, CJ, Kapahi, G, LaCaro, F, Michael, P, Stephenson, MD, Puckett, HM. 1998. Chemistry, Toxicity, and benthic community conditions in selected sediments of the San Diego Bay region. Final Addendum Report . State Water Resources Control Board, Sacramento California. pp 21.

Jacobi, M, Fairey, RF, Roberts, C, Clark, R, Downing, J, **Anderson, BS**, Hunt, BM, Tjeerdema, RS, R, Oakden, J, Wilson, CJ, Kapahi, G, Stephenson, MD, Puckett. 1998. Chemistry, toxicity and benthic community conditions in selected sediments of the North Coast Region. Final Report, State Water Resources Control Board, Sacramento California. pp 85.

Downing, J, Jacobi, M, Fairey, RF, Roberts, C, Clark, R, **Anderson, BS**, Hunt, BM, Tjeerdema, RS, R, Oakden, J, Wilson, CJ, Kapahi, G, Stephenson, MD, Puckett. 1998. Chemistry, toxicity and benthic community conditions in selected sediments of the Central Coast Region. Final Report, State Water Resources Control Board, Sacramento California. pp 75.

Anderson, BS, Hunt, JW, Tudor, S, Newman, J, Tjeerdema, RS, Fairey, R, Oakden, J, Bretz, C, Wilson, CJ, LaCaro, F, Stephenson, MD, Puckett, HM, Long, ER, Fleming, T, and K Summers. 1997. Chemistry, toxicity and benthic community conditions in sediments of selected southern California bays and estuaries. Final Report, State Water Resources Control Board, Sacramento California. pp 140.

EXHIBIT F
Standard Agreement

Phillips, BM, **Anderson, BS**, and Hunt, JW. 1997. Investigating classes of compounds associated with sediment toxicity at regional monitoring program river stations. *In*: RMP – Regional Monitoring program for Trace Substances. 1996 Annual Report. San Francisco Estuary Institute. Richmond, CA. pp 119-128.

Hunt, JW, **Anderson, BS**, Tudor, S, Stephenson, MD, Puckett, HM, Palmer, FH, and M Reeve. 1996. Marine Bioassay Project Eighth Report: Refinement and implementation of four effluent toxicity testing methods using indigenous marine species. Report No. 96-4 WQ. State Water Resources Control Board, Sacramento California. pp 109.

Fairey, RS, Bretz, C, Lamerdin, S, Hunt, JW, **Anderson, BS**, Tudor, S, Wilson, CJ, LaCaro, F, Stephenson, MD, Puckett, HM, Long, ER. 1996. Chemistry, Toxicity, and benthic community conditions in selected sediments of the San Diego Bay region. Final Report. State Water Resources Control Board, Sacramento California. pp 162.

Thompson, B., Hunt, JW, **Anderson, BS**. 1995. Patterns in sediment toxicity: 1991-1995. *In*: Regional Monitoring Program for trace substances - RMP 1995 annual report. San Francisco Estuary Institute. 324 pp.

Sapudar, R.A., Wilson, C.J., Reid, M.L., Long, E.R., Stephenson, M., Puckett, M.H., Fairey, R.A., Hunt, J.W., **Anderson, B.S.**, Holstad, D.R., Newman, J. and Birosik, S. 1994. Sediment chemistry and toxicity in the vicinity of the Los Angeles and Long Beach Harbors. Final Report for the State Water Resources Control Board and the National Oceanic and Atmospheric Administration. 77 pp.

Flegal, A.R., Riseborough, R.W., **Anderson, B.S.**, Hunt, J.W., Anderson, S., Oliver, J., Stephenson, M. and Packard, R. 1994. San Francisco Estuary Pilot Regional Monitoring Program: Sediment Studies. Final Report to the San Francisco Regional Water Quality Control Board. July, 1994. 125 pp.

Anderson, B.S., Hunt, J.W., McNulty, H.R., Stephenson, M.D., Palmer, F.H., Denton, D.L. and Reeve, M. . 1994. Marine Bioassay Project Seventh Report: Refinement of effluent toxicity testing protocols for four marine species. Water Resources Control Board Report No. 94-2WQ. Sacramento, CA. 124 pp.

Hunt, J.W., **Anderson, B.S.**, Turpen, S.L., Barber, H.R., Martin, M., McKeown, D.L. and Palmer, F.H. 1991. Marine Bioassay Project Sixth Report: Interlaboratory comparisons and protocol development with four marine species. Water Resources Control Board Report No. 91-6WQ. Sacramento, CA. 204 pp.

Anderson, B.S., Hunt, J.W., Turpen, S.L., Coulon, A.R., Martin, M., McKeown, D.L. and Palmer, F.H. 1990. Procedures manual for conducting toxicity tests developed by the Marine Bioassay Project. Division of Water Quality report no. 90-10WQ, California State Water Resources Control Board, Sacramento, California. 113 pp.

EXHIBIT F
Standard Agreement

Anderson, B.S., Hunt, J.W., Turpen, S.L., Coulon, A.R., Martin, M., McKeown, D.L. and Palmer, F.H. 1990. Marine Bioassay Project Fifth Report: Protocol development and interlaboratory testing with complex effluents. Division of Water Quality report no. 90-5WQ, California State Water Resources Control Board, Sacramento, California. 182 pp.

Hunt, J.W., **Anderson, B.S.**, Turpen, S.L., Coulon, A.R., Martin, M., Palmer, F.H. and Janik, J.J. 1989. Marine Bioassay Project, fourth report: experimental evaluation of effluent toxicity testing protocols with giant kelp, mysids, red abalone, and topsmelt. Division of Water Quality report no. 89-5WQ, California State Water Resources Control Board, Sacramento, California

Anderson, B.S., Hunt, J.W., Martin, M. and Palmer, F.H. 1987. Marine Bioassay Project- Third Report- Short-term tests using abalone, kelp, and mysids to estimate the chronic toxicity of municipal effluents. California State Water Resources Control Board. 130 p.

Anderson, B.S. 1987. Factors controlling the distribution of the high intertidal green alga *Prasiola meridionalis*. Masters Thesis. San Jose State University. 51 pp.

Anderson, B.S. and Kvitek, R.G. 1987. Sea otter predation and the distribution of deep burrowing bivalves in the Elkhorn Slough National Estuarine Research Reserve. NOAA Tech. Memorandum # NA86AA-D-CZ033. 45 p.

Martin, M., Hunt, J.W., **Anderson, B.S.**, Espinosa, L. and Palmer, F.H. 1986. Marine Bioassay Project- Second Report- Acute toxicity tests with red abalone, mysid shrimp, and giant kelp. California State Water Resources Control Board. 65 p.

Abstracts*

December 1986 Western Society of Naturalists. "Factors controlling the distribution of the high intertidal green alga *Prasiola meridionalis*". (published abstract).*

April 1987 California Water Pollution Control Federation. "Marine toxicity bioassays for complex effluents." (published abstract with J.W. Hunt).*

November 1988 Society of Environmental Toxicology and Chemistry "Abalone veliger larval development and metamorphosis as sublethal indicators of effluent toxicity" (published abstract with J. Hunt).

November 1988 Society of Environmental Toxicology and Chemistry "Effluent toxicity testing with the laminarian alga *Macrocystis pyrifera*" (published abstract with J. Hunt).*

December 1988 American Society of Zoologists/Western Society of Naturalists "Toxicity tests with giant kelp *Macrocystis pyrifera*" (published abstract with J. Hunt).*

EXHIBIT F
Standard Agreement

December 1988 American Society of Zoologists/Western Society of Naturalists "Pollution effects on larvae of the red abalone, *Haliotis rufescens*" (published abstract with J. Hunt).

November 1989 Society of Environmental Toxicology and Chemistry "Relative sensitivity of early life-stages of topsmelt *Atherinops affinis* to copper." (published abstract with D. Middaugh, J. Hunt, S. Turpen, and A. Coulon).*

November 1989 Society of Environmental Toxicology and Chemistry "Experimental evaluation of the mysid *Holmesimysis costata* for effluent toxicity testing" (published abstract with J. Hunt, S. Turpen, and A. Coulon).

November 1989 Society of Environmental Toxicology and Chemistry "Seasonal and geographic effects on the toxicity of copper to microscopic stages of the giant kelp *Macrocystis pyrifera*." (published abstract with J. Hunt, S. Turpen, and A. Coulon).*

February 1990 United States Environmental Protection Agency Workshop: Culture and Toxicity Testing of West Coast Marine Organisms. "Summary of Toxicity Testing with *Macrocystis pyrifera*, *Haliotis rufescens*, *Holmesimysis costata*, and *Atherinops affinis*." (published proceedings and four papers with J. Hunt and S. Turpen).*

November 1990 Monterey Bay Research Symposium. "Use of Indigenous Species To Assess The Affects of Pollution in California Marine Communities."*

December 1990 Western Society of Naturalists. "Toxicity Testing With The Kelp Forest Mysid *Holmesimysis costata*." (published abstract with J. Hunt and S. Turpen).

April 1991 ASTM, American Society for Testing and Materials, "From research to routine: a review of toxicity testing with marine molluscs". Published review paper in ASTM Special Technical Publication. Published abstract with J. Hunt.

April 1991 ASTM, American Society for Testing and Materials, "A review of the status of marine plants in toxicity testing". American Society of Testing and Materials Special Technical Publication on Environmental Toxicology and Risk Assessment, ASTM, Philadelphia, PA. Published abstract with G. Thursby, G. Walsh, and D. Steele.

November 1991 Society of Environmental Toxicology and Chemistry (SETAC Seattle), "Off-season spawning and factors influencing toxicity test development with topsmelt (*Atherinops affinis*). Published abstract with J. Hunt, S. Turpen, H. Barber, and M. Englund.*

November 1991 Society of Environmental Toxicology and Chemistry (SETAC Seattle), "Age-specific sensitivity of larval topsmelt (*Atherinops affinis*) to copper". Published abstract with H. Barber, J. Hunt, S. Turpen, M. Englund, M. Singer.

EXHIBIT F
Standard Agreement

December 1991 State Water Resources Control Board Technical Workshop (California Academy of Sciences San Francisco). "Introduction to toxicity tests developed by the Marine Bioassay Project".

May 1992 Southern California Academy of Sciences: Annual Meeting.
"Effluent toxicity assessment using California Marine Species". Published abstract with J. Hunt.*

October 1992 Santa Ana Regional Water Quality Control Board and UC Riverside Extension: Chronic Toxicity Testing Workshop "Marine Bioassay Project Protocols".*

November 1992 Society of Environmental Toxicology and Chemistry (SETAC Cincinnati). "Salinity-dependent sensitivity of topsmelt (*Atherinops affinis*) to copper and azide". Published abstract with H. McNulty, J. Hunt, S. Turpen, M. Englund, W. Piekarski.*

November 1992 Society of Environmental Toxicology and Chemistry (SETAC Cincinnati). "Development of a sublethal toxicity test with the mysid *Holmesimysis costata*". Published abstract with J. Hunt, S. Turpen.

November 1992 Society of Environmental Toxicology and Chemistry (SETAC Cincinnati). "A review of the interlaboratory precision of chronic toxicity tests used in NPDES effluent monitoring". Published abstract with D.L. McKeown, L.A. Suer, and J.W. Hunt.

March 1993 Society of Environmental Toxicology and Chemistry (SETAC Europe). "Development of a toxicity testing program using indigenous marine species to monitor effluent discharges". Published abstract with J. Hunt, and B.S. Anderson, D.L. McKeown and F.H. Palmer.

May 1993 Society of Environmental Toxicology and Chemistry (Northern California Regional Meeting of SETAC). Comparison of short-term and long-term endpoints in the larval *Haliotis rufescens* chronic toxicity test. Published abstract with P.T. Conroy and J.W. Hunt.

November 1993 Society of Environmental Toxicology and Chemistry (SETAC Houston). Comparison of three marine chronic toxicity tests for interstitial water toxicity assessment. Published abstract with J. W. Hunt and H. R. McNulty.*

November 1993 Society of Environmental Toxicology and Chemistry (SETAC Houston). An evaluation of *Rhepoxinius abronius* and *Neanthes arenaceodentata* for use in sediment toxicity testing. Published abstract with J. W. Hunt and H. R. McNulty.*

November 1993 Society of Environmental Toxicology and Chemistry (SETAC Houston). Age-specific toxicity of azide and copper to larval topsmelt (*Atherinops affinis*). Published abstract with H. R. McNulty, J. W. Hunt, S. L. Turpen, and M. M. Singer.

EXHIBIT F
Standard Agreement

November 1993 Society of Environmental Toxicology and Chemistry (SETAC Houston). Toxicity of sediment elutriate and pore water along a contamination gradient in San Francisco Bay. Published abstract with J. W. Hunt, M. Stephenson, and K. Taberski.

May 1994 Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC in Oakland). A comparative evaluation of short-term and long-term exposures of kelp gametophytes to azide and copper. Published abstract with W. J. Piekarski and J. W. Hunt.

May 1994 Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC in Oakland). Toxicity testing at the sediment-water interface. Published abstract with J. Hunt, M. Hester, B. Phillips, M. Stephenson, M. Puckett, and R. Fairey.*

November 1994 Society of Environmental Toxicology and Chemistry (SETAC Denver). A comparative evaluation of short-term and long-term exposures of kelp gametophytes to azide and copper. Published abstract with W. J. Piekarski and J. W. Hunt.

November 1994 Society of Environmental Toxicology and Chemistry (SETAC Denver). Toxicity testing at the sediment-water interface. Published abstract with J. Hunt, M. Hester, B. Phillips, M. Stephenson, M. Puckett, and R. Fairey.*

November 1994 Society of Environmental Toxicology and Chemistry (SETAC Denver). Effect of sampling method on measured concentrations of sulfide and ammonia in sediment toxicity tests. Published abstract with B.M. Phillips and J. W. Hunt.

May 1995 Southern California Academy of Science (SCAS Long Beach). A comparison of several biological measures for assessing sediment contamination in Southern California bays and estuaries. Published abstract with J. Anderson, and J.W. Hunt.

July 1995. Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC in Oakland). Identification of reference sites, evaluation of toxicity tests and development of toxicity identification evaluations (TIEs) for sediment in San Francisco Bay. Published abstract with K.T. Taberski, J.W. Hunt, J. Newman, S.R. Hanson, G.G. Wortham, W.R. Fairey, M. Stephenson, and H.M. Puckett.

July 1995. Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC in Oakland). Toxicity evaluation of sediments from potential reference sites in San Francisco Bay. Published abstract with J.W. Hunt, J. Newman, R.W. Smith, K.T. Taberski, W.R. Fairey, M. Stephenson, and H.M. Puckett.

July 1995. Society of Environmental Toxicology and Chemistry

EXHIBIT F
Standard Agreement

(Northern California Chapter, NorCal SETAC in Oakland). Spatial and temporal sensitivity of Purple sea urchins (*Strongylocentrotus purpuratus*) to zinc. published abstract with B.P. Phillips, and J.W. Hunt

November 1995 Society of Environmental Toxicology and Chemistry (SETAC Vancouver, B.C.). "Toxicity evaluation of sediments from potential reference sites in San Francisco Bay." Published abstract with K.M. Taberski, J. W. Hunt, W.R. Fairey, H.M. Puckett, R.W. Smith, S.R. Hansen, and G.G. Wortham.

November 1995. Society of Environmental Toxicology and Chemistry (SETAC - Vancouver,BC). Spatial and temporal sensitivity of Purple sea urchins (*Strongylocentrotus purpuratus*) to zinc. Published abstract with B.P. Phillips, and J.W. Hunt.

November 1995. Society of Environmental Toxicology and Chemistry (SETAC - Vancouver,BC). Comparative evaluation of sediments from the coast of southern California. Published abstract with J.W. Anderson, T. Tjeerdema, J. Newman, J. Hunt, M. Stephenson, M. Puckett, R. Fairey, and E. Long.

November 1995. Society of Environmental Toxicology and Chemistry (SETAC - Vancouver,BC). Effects of homogenization on solid-phase sediment toxicity. Published abstract with J. Hunt, T. Tjeerdema, J. Newman, M. Stephenson, M. Puckett, R. Fairey, and K. Taberski.*

November 1996 Society of Environmental Toxicology and Chemistry (SETAC Washington, DC). "Toxicity of a coastal stream, lagoon, and tributaries receiving agricultural drain water." Published abstract with J. Hunt and B.P. Phillips.

November 1996. Society of Environmental Toxicology and Chemistry (SETAC - Washington, DC). Seasonal trends in sediment toxicity in San Francisco Bay. Published abstract with J. Hunt, B. Phillips, D. Hardin, A. Gunther, B. Thompson.

March 1997. California and the World Ocean (CWO - San Diego, CA). Chemistry, toxicity, and benthic community conditions of sediments from selected southern California bays and estuaries. Published abstract with J. Hunt, R. Fairey, H. Max Puckett, C. Wilson, E. Long, and J. Anderson.*

June 1997. Society of Environmental Toxicology and Chemistry, Northern California Chapter (NorCal SETAC- Sacramento, CA). Chemistry, toxicity, and benthic community conditions of sediments from selected southern California bays and estuaries. Published abstract with J. Hunt, R. Fairey, H. Max Puckett, C. Wilson, E. Long, and J. Anderson.*

June 1997. Society of Environmental Toxicology and Chemistry, Northern California Chapter (NorCal SETAC- San Francisco, CA). "Toxicity assessment of a coastal stream, lagoon, and

EXHIBIT F
Standard Agreement

tributaries receiving urban and agricultural runoff." Published abstract with J. Hunt, B. Phillips, M. Englund, W. Piekarski, R. Tjeerdema, and V. deVlaming.

November 1997. Society of Environmental Toxicology and Chemistry (SETAC). "Assessment of Los Angeles Harbor area sediments using the sediment quality triad approach." Published abstract with J. Hunt, R. Tjeerdema, R. Fairey, J. Oakden, M. Puckett, C. Wilson, E. Long, S. Birosik. *

November 1997. Society of Environmental Toxicology and Chemistry (SETAC). "Chemistry, toxicity, and benthic community conditions in sediments of the San Diego Bay region." Published abstract with R. Fairey, M. Jacobi, C. Roberts, S. Lamerdin, R. Clark, J. Downing, M. Stephenson, M. Puckett, J. Hunt, R. Newman, C. Wilson, E. Long.

November 1997. Society of Environmental Toxicology and Chemistry (SETAC). "Using a weight-of-evidence approach to identify toxic hotspots in California bays and estuaries." Published abstract with C. Wilson, F. LaCaro, G. Kapahi, R. Fairey, J. Hunt, M. Puckett.

November 1997. Society of Environmental Toxicology and Chemistry (SETAC). "Identification of impacted sediment sites in San Francisco Bay." Published abstract with K. Taberski, J. Hunt, M. Puckett, R. Fairey, J. Oliver, and B. Thompson.

November 1997. Society of Environmental Toxicology and Chemistry (SETAC). "Sediment toxicity in San Francisco Bay: Results from large-scale monitoring programs." Published abstract with J. Hunt, R. Tjeerdema, M. Puckett, R. Fairey, K. Taberski, and B. Smith.

November 1997. Society of Environmental Toxicology and Chemistry (SETAC). "Relationships between sediment contamination and toxicity in San Francisco Bay." Published abstract with B. Thompson, J. Hunt, B. Phillips, and K. Taberski.

November 1997. Society of Environmental Toxicology and Chemistry (SETAC). "Assessing ecological impacts on benthic community structure from sediments contaminated with multiple pollutants." Published abstract with R. Fairey, J. Oakden, S. Lamerdin, J. Hunt, and E. Long.

November 1997. Society of Environmental Toxicology and Chemistry (SETAC). "Comparison of solid-phase, pore water, and sediment-water interface exposure systems in sediment toxicity assessments with marine invertebrates." Published abstract with B. Phillips, J. Hunt, R. Tjeerdema, K. Taberski, R. Fairey, M. Puckett and M. Martin

November 1997. Society of Environmental Toxicology and Chemistry (SETAC). "Chemistry, toxicity, and benthic community conditions of sediments from selected southern California bays and estuaries." Published abstract with J. Hunt, R. Tjeerdema, R. Fairey, J. Oakden, M. Puckett, C. Wilson, E. Long, S. *

EXHIBIT F
Standard Agreement

November 1997. Society of Environmental Toxicology and Chemistry (SETAC). "Effects of interstitial water and elutriate pH on larval stages of mussels and sea urchins." Published abstract with B. Phillips, J. Hunt, W. Piekarski, and R. Tjeerdema.

November 1998. Society of Environmental Toxicology and Chemistry (SETAC). "Relationship between sediment toxicity and benthic community degradation in California coastal waters." Published abstract with J. Hunt, R. Tjeerdema, R. Fairey, J. Oakden, M. Puckett, C. Wilson, E. Long, S. *

November 1998. Society of Environmental Toxicology and Chemistry (SETAC). "Ecotoxicological monitoring at a remediated superfund site." Published abstract with J. Hunt, R. Tjeerdema, R. Fairey, M. Martin. *

November 1998. Society of Environmental Toxicology and Chemistry (SETAC). "Use of the sediment quality triad, TIEs, and gradient studies in identifying toxic hotspots in San Francisco Bay," Published abstract with J. Hunt, B. Phillips, R. Tjeerdema, R. Fairey, M. Puckett, M. Stephenson, and K. Taberski.

November 1998. Society of Environmental Toxicology and Chemistry (SETAC). "Sediment toxicity thresholds based on 90th percentile MSD values." Published abstract with B. Phillips and J. Hunt.

November 1998. Society of Environmental Toxicology and Chemistry (SETAC). "Relationships between benthos and sediment toxicity in San Francisco Bay." Published abstract with B. Thompson, J. Hunt, J. Oakden, and K. Taberski.

November 1998. Society of Environmental Toxicology and Chemistry (SETAC). "Pilot study for synoptic water quality monitoring in an urban/agricultural watershed." Published abstract with J. Downing, R. Fairey, C. Roberts, J. Hunt, and R. Tjeerdema.

November 1999. Society of Environmental Toxicology and Chemistry (SETAC). History of a Hot Spot – Moss Landing Harbor, California. Anderson, B*, Hunt, J, Phillips, B, Tjeerdema, R, Stoelting, M, Fairey, R. Conference proceedings, SETAC, Philadelphia.

November 1999. Society of Environmental Toxicology and Chemistry (SETAC). Investigating Causes of Sediment Toxicity in the San Francisco Bay/Delta. Phillips, BM, Anderson, BS, Hunt, JW, Thompson, B. Conference proceedings, SETAC, Philadelphia.

November 1999. Society of Environmental Toxicology and Chemistry (SETAC). Sediment Quality Assessment in the San Francisco Bay and Delta: Screening for Hot Spots, Investigating Sources and Causes of Toxicity. Hunt, JW, Anderson, BS, Phillips, BM., Tjeerdema, RS, Fairey, R, Puckett, HM, Stephenson, M, Taberski, KM. Conference proceedings, SETAC, Philadelphia.

EXHIBIT F
Standard Agreement

November 1999. Society of Environmental Toxicology and Chemistry (SETAC). New acute-to-chronic toxicity data and its implication for the national saltwater nickel criteria. Watson, DJ, Hunt, JW, Anderson, BS. Conference proceedings, SETAC, Philadelphia.

April 2000 Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC Davis). Toxicity of Metal Mixtures to Purple Sea Urchins (*Strongylocentrotus purpuratus*). Published abstract with w/P.A. Nicely, J.W. Hunt, B.S. Anderson, F.A. Palmer and Sue Carley.

April 2000 Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC Davis). Investigating causes of ambient toxicity in the Salinas River watershed. Published abstract with w/ J.W. Hunt, B.S. Anderson, and P.A. Nicely.

April 2000 Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC Davis). Tolerance of several marine toxicity test organisms to ammonia and artificial salts. Published abstract with w/P.A. Nicely, J.W. Hunt, B.S. Anderson, F.A. Palmer and Sue Carley.

November 2000. Society of Environmental Toxicology and Chemistry (SETAC Nashville TN). Toxicity of Metal Mixtures to Purple Sea Urchins (*Strongylocentrotus purpuratus*). Published abstract with w/P.A. Nicely, J.W. Hunt, B.S. Anderson, F.A. Palmer and Sue Carley.

November 2000 Society of Environmental Toxicology and Chemistry (SETAC Nashville TN). Investigating causes of ambient toxicity in the Salinas River watershed. Published abstract with w/ J.W. Hunt, B.S. Anderson, and P.A. Nicely.

November 2000 Society of Environmental Toxicology and Chemistry (SETAC Nashville TN). Tolerance of several marine toxicity test organisms to ammonia and artificial salts. Published abstract with w/P.A. Nicely, J.W. Hunt, B.S. Anderson, F.A. Palmer and Sue Carley.

November 2000. Society of Environmental Toxicology and Chemistry (SETAC Nashville TN). Investigations of causes of amphipod mortality in San Francisco Bay sediments. Anderson, B*, Hunt, J, Phillips, B, Tjeerdema, R, Sericano, J, Nicely, P, Thompson, B, Hoenike, R.

June 2001 Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC Santa Cruz). Water and sediment monitoring in an urban/agricultural watershed. Published abstract with B. Phillips, J. Hunt.

June 2001 Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC Santa Cruz). Ecotoxicologic effects of agricultural drain water in the Salinas River. Anderson, B*, Hunt, J, Phillips, B, Nicely, P, Gilbert, K, Kosaka, R, deVlaming, V, Tjeerdema, R.

EXHIBIT F
Standard Agreement

June 2001 Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC Santa Cruz). Acute and chronic nickel toxicity to marine organisms: implications for water quality criteria. Published abstract with J. Hunt, B. Phillips, R. Tjeerdema.

November 2001. Society of Environmental Toxicology and Chemistry (SETAC Baltimore MD). Ecotoxicologic effects of agricultural drain water in the Salinas River. Anderson, B*, Hunt, J, Phillips, B, Nicely, P, Gilbert, K, Kosaka, R, deVlaming, V, Tjeerdema, R.

November 2001. Society of Environmental Toxicology and Chemistry (SETAC Baltimore MD). In Situ Water and Sediment Monitoring in an Agricultural Watershed. Published abstract with Phillips, B.M, Hunt, J.W., Nicely, P.A., Gilbert, K.D., Kosaka, R.A.;

May 2002. Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC Davis). Evidence of pesticide impacts on macroinvertebrate communities in the Salinas River. B.S. Anderson, J.W. Hunt, B.M. Phillips, P.A. Nicely, V. de Vlaming, R. Tjeerdema., N. Richard; V. Connor.*

May 2002. Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC Davis). Causes of sediment toxicity in Grizzly Bay, California. Published abstract with Phillips, B.M, Hunt, J.W., Nicely, P.A., Tjeerdema, R, Sericano, J, Thompson, B, Hoenike, R.*

November 2002. Society of Environmental Toxicology and Chemistry (SETAC Salt Lake City, UT). Evidence of pesticide impacts on benthic macroinvertebrate communities in the Salinas River. B.S. Anderson, J.W. Hunt, B.M. Phillips, P.A. Nicely, V. de Vlaming, R. Tjeerdema, N. Richard; V. Connor.*

November 2002. Society of Environmental Toxicology and Chemistry (SETAC Salt Lake City, UT). Comparison between laboratory and in situ sediment toxicity tests with the haustoriid amphipod *Eohaustorius estuarius*. B.S. Anderson, J.W. Hunt, B.M. Phillips, P.A. Nicely, R. Tjeerdema, Martin, M.*

November 2002. Society of Environmental Toxicology and Chemistry (SETAC Salt Lake City, UT). Causes of sediment toxicity in Grizzly Bay, California. Published abstract with Phillips, B.M, Hunt, J.W., Nicely, P.A., Tjeerdema, R, Sericano, J, Thompson, B, Hoenike, R.*

November 2002. Society of Environmental Toxicology and Chemistry (SETAC Salt Lake City, UT). Selective elution of metals from cation exchange column in toxicity identification evaluations. Published abstract with Phillips, B.M, Hunt, J.W., Nicely, P.A., Tjeerdema, R, Thompson, B, Beegan, C.*

May 2003 . Society of Environmental Toxicology and Chemistry (NorCal SETAC, Berkeley, CA). Preliminary identification of bifenthrin toxicity to *Hyalella azteca* in sediment from the

EXHIBIT F
Standard Agreement

central Valley, California. Published abstract with Phillips, BM, Anderson BS, Hunt, JW, Nicely, PA, Tjeerdema, RS, Rowan, J, Miller, J, Crane, D, Mekebri, A.

May 2003. Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC - Berkeley). Summary of 10 years of sediment toxicity monitoring for the San Francisco Estuary Regional Monitoring Program. Published abstract with Phillips, BM, Hunt, JW, Nicely, PA, Tjeerdema RS, Thompson, B, Lowe, S, Davis J, Taberski K*

November 2003. Society of Environmental Toxicology and Chemistry (SETAC, Austin, TX). Preliminary identification of bifenthrin toxicity to *Hyalella azteca* in sediment from the central Valley, California. Published abstract with Phillips BM, Anderson BS, Hunt, JW, Nicely, PA, Tjeerdema, RS, Rowan, J, Miller, J, Crane, D, Mekebri, A.

November 2003. Society of Environmental Toxicology and Chemistry (SETAC, Austin, TX). Integrated assessment of agricultural drainwater in the Santa Maria River watershed. Anderson, BS*, Phillips, BM, Nicely, PA, Hunt, JW, Tjeerdema, RS, Worcester, K, Adams, M, Richard, N.

May 2004. Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC - Davis). Causes of Sediment Toxicity in the lower Santa Maria River watershed (California, USA). S.A. Huntley, B.M. Phillips, B.S. Anderson, J.W. Hunt, R. Tjeerdema, N. Richard, K. Worcester.

May 2004. Society of Environmental Toxicology and Chemistry (Northern California Chapter, NorCal SETAC - Davis). Application of carboxylesterase in reducing bifenthrin and permethrin toxicity to *Hyalella azteca*. B.M. Phillips, S.A. Huntley, B.S. Anderson, J.W. Hunt, R. Tjeerdema, C. Wheelock, J. Miller, M. Miller.

November 2004. Society of Environmental Toxicology and Chemistry (SETAC, Portland, OR) Causes of Sediment Toxicity in the lower Santa Maria River watershed (California, USA). S.A. Huntley, B.M. Phillips, B.S. Anderson, J.W. Hunt, R. Tjeerdema, N. Richard, K. Worcester.

November 2004. Society of Environmental Toxicology and Chemistry (SETAC, Portland, OR). Application of carboxylesterase in reducing bifenthrin and permethrin toxicity to *Hyalella azteca*. B.M. Phillips, S.A. Huntley, B.S. Anderson, J.W. Hunt, R. Tjeerdema, C. Wheelock, J. Miller, M. Miller.

November 2004. Society of Environmental Toxicology and Chemistry (SETAC, Portland, OR) Identification of primary stressors in the Salinas River watershed. B.S. Anderson*; B.M. Phillips; J.W. Hunt; K. Worcester; N. Richard; R. Tjeerdema.

November 2004. Society of Environmental Toxicology and Chemistry (SETAC, Portland, OR). Causes of Seasonal Toxicity in Drainages to the Monterey Bay National Marine Sanctuary (California, USA). B.M. Phillips, B.S. Anderson, J.W. Hunt, R. Tjeerdema, B. Hoover, J. Gonzalez, S. Leiker, S. Healy, T. Doan, C. Beegan.

EXHIBIT F
Standard Agreement

50. 2004 Society of Environmental Toxicology and Chemistry (National Chapter – Portland). Comparison of methods for evaluating chronic toxicity in marine sediments. Published abstract with Greenstein D, Bay S, Anderson BS, Chandler CT, Farrar D, Ringwood A, Keppler C. (November).
51. 2004 Society of Environmental Toxicology and Chemistry (National Chapter – Portland). Relationships between in-stream toxicity, pesticide application rates, and nitrate pollution on multiple watershed scales. Published abstract with Hunt JW, Anderson BS, Tjeerdema RS, Richard N, Worcester K. (November).
52. 2004 Society of Environmental Toxicology and Chemistry (National Chapter – Portland). Comparison of acute and chronic toxicity methods for evaluating bay and estuarine sediments in California. Published abstract with Bay S, Greenstein D, Anderson BS, Chandler CT, Farrar D, Ringwood A, Keppler C. (November).
53. 2005. California Estuarine Research Society. Identification of causes of sediment toxicity using toxicity identification evaluation procedures (TIEs). BS Anderson*, BM Phillips, JW Hunt. Invited. March
54. 2005. Coastal Response Research Center- University of New Hampshire. Acute and Chronic Effects of Crude Oil and Dispersed Oil on Chinook Salmon Smolts (*Oncorhynchus Tshawytscha*). CY Lin, BS Anderson, M Viant, and RS Tjeerdema. March.
55. 2005 Society of Environmental Toxicology and Chemistry (NorCal Chapter, UC Berkeley). Characterization and identification of pyrethroid toxicity in sediment: a review of TIE case studies. Published abstract with Phillips, BM, Hunt JW, Tjeerdema RS, Worcester K, Rowan J, Carpio-Obeso M, Richard N. (May)
56. 2005 Society of Environmental Toxicology and Chemistry (NorCal Chapter, UC Berkeley). Causes of Toxicity in the New River. Published abstract with Huntley SA, Anderson BS, Hunt JW, Tjeerdema RS, Carpio-Obeso M, Connor V. (May)
57. 2005 Society of Environmental Toxicology and Chemistry (NorCal Chapter, UC Berkeley). Relationships between Pesticide Application Rates, Nitrate, and Toxicity at Multiple Watershed Scales. Published abstract with Hunt JW, Anderson BS, Tjeerdema RS, Worcester K, Angelo M, Bern A, Richard N, Fulfrost B, Mulvaney D. (May)

EXHIBIT F
Standard Agreement

58. 2005 Society of Environmental Toxicology and Chemistry (National Chapter, SETAC Baltimore, MD). National Chapter, SETAC Baltimore, MD). Characterization and identification of pyrethroid toxicity in sediment: a review of TIE case studies. Published abstract with Phillips, BM, Hunt JW, Tjeerdema RS, Worcester K, Rowan J, Richard N.
59. 2005 Society of Environmental Toxicology and Chemistry (National Chapter, SETAC Baltimore, MD). Inter-laboratory variation and applicability of sublethal sediment test methods using *Mercenaria mercenaria*, and *Mytilus galloprovincialis*. Published abstract with Phillips, BM, Hunt JW, Tjeerdema RS, Worcester K, Rowan J, Richard N, Young DL, Bay SM, Greenstein DJ, Ringwood A, Keppler C, Hester B. (May)
60. 2005 Society of Environmental Toxicology and Chemistry (National Chapter, SETAC Baltimore, MD). Comparison of marine amphipod test species responsiveness to contaminated field sediments. Published abstract with Bay S, Gries T, Anderson B, Field L, Moore D, Greenstein D. (May)
61. 2006. Society of Environmental Toxicology and Chemistry (NorCal Chapter, UC Davis). Evaluating the Efficacy of Sediment Toxicity Identification Evaluation (TIE) Methods: Case Studies. Published abstract with Phillips, BM, Hunt JW, Clark SL, Voorhees JP, Tjeerdema RS, Stewart M, Casteline J. (May)
62. 2006 Society of Environmental Toxicology and Chemistry (NorCal Chapter, UC Davis). Evaluating the Efficacy of Marine Sediment Toxicity Identification Evaluation (TIE) Methods Using Single and Multiple-Chemical Spiked Sediments. Published abstract with Anderson BS, Hunt JW, Clark SL, Voorhees JP, Tjeerdema RS, Stewart M, Casteline J. (May)
63. 2006 Society of Environmental Toxicology and Chemistry (NorCal Chapter, UC Davis). Evaluating the Efficacy of Freshwater Sediment Toxicity Identification Evaluation (TIE) Methods Using Single and Multiple-Chemical Spiked Sediments. Published abstract with Anderson BS, Hunt JW, Clark SL, Voorhees JP, Tjeerdema RS, Stewart M, Casteline J. (May)
- 64.* 2006. American Chemical Society (ACS, San Francisco, CA). Recent advances in sediment toxicity identification evaluations emphasizing pyrethroid pesticides. Published abstract with Phillips, BM, Hunt JW, Clark SL, Voorhees JP, Tjeerdema RS. Invited. (September).
65. 2006 October 2006*. CALFED. Recent advances in sediment toxicity identification evaluations emphasizing pyrethroid pesticides. Published abstract with Anderson BS, Hunt JW, Clark SL, Voorhees JP, Tjeerdema RS.

EXHIBIT F
Standard Agreement

66. October 2006. CALFED. Characterizing Sediment Contamination and Potential Ecological Effects in Six Tributaries of the San Francisco Bay Estuary. Lowe, S.; Anderson, B.; Phillips, B; Grosso, C.; Ross, J.; Franz, A.; Stevanovic, P.; Yee, D.
67. 2006 Society of Environmental Toxicology and Chemistry (National Chapter, SETAC Montreal, Quebec, Canada). Evaluation of Sediment TIE Methods for Application to TMDLs – Part Two: Case Studies. Published abstract with Phillips, BM, Hunt JW, Clark SL, Voorhees JP, Tjeerdema RS, Stewart M, Casteline J. (November).
- 68* 2006. Society of Environmental Toxicology and Chemistry (National Chapter, SETAC Montreal, Quebec, Canada). Evaluating the Efficacy of Sediment Toxicity Identification Evaluation (TIE) Methods Using Spiked Sediments - Part 1: Freshwater Sediment. Published abstract with Phillips, BM, Hunt JW, Clark SL, Voorhees JP, Tjeerdema RS, Stewart M, Casteline J. (November).
69. 2006 Society of Environmental Toxicology and Chemistry (National Chapter, SETAC Montreal, Quebec, Canada). Evaluating the Efficacy of Sediment Toxicity Identification Evaluation (TIE) Methods Using Spiked Sediments - Part 2: Marine Sediment. Published abstract with Phillips, BM, Hunt JW, Clark SL, Voorhees JP, Tjeerdema RS, Stewart M, Casteline J. (November).
- 70* 2006 Society of Environmental Toxicology and Chemistry (National Chapter, SETAC Montreal, Quebec, Canada). Evaluation of sediment TIE methods for application to TMDLs - Part One: Spiked sediment results. Published abstract with Phillips, BM, Hunt JW, Clark SL, Voorhees JP, Tjeerdema RS, Stewart M, Casteline J. (November).
- 71* 2006 Society of Environmental Toxicology and Chemistry (National Chapter, SETAC Montreal, Quebec, Canada). Evidence of sediment toxicity due to pyrethroid pesticides at two marine sites in southern California. Published abstract with Phillips, BM, Hunt JW, Clark SL, Voorhees JP, Tjeerdema RS, Stewart M, Casteline J. (November).
72. 2007. Fourth International Conference on Remediation of Contaminated Sediments. Fourth International Conference on Remediation of Contaminated Sediments. Evaluation of Sediment TIE Methods for Application to TMDLs: Case Studies. Published abstract with Anderson BS, Hunt JW, Clark SL, Voorhees JP, Tjeerdema RS, Stewart M, Casteline J.

EXHIBIT F
Standard Agreement

73. 2007. Toxic Actions of Crude Versus Dispersed Oil in Chinook Salmon Smolts. Ninth International Effects of Oil on Wildlife Conference. Published abstract with R. Tjeerdema, B. Phillips, M. Sowby, C. Lin.
74. 2007. Society of Environmental Toxicology and Chemistry (National Chapter – Milwaukee, WI). Statewide Assessment of Sediment Toxicity and Pyrethroid Pesticides in California's Urban Waterways: Toxicity Identification Evaluation Results. Published abstract with Clark SL, Voorhees, JP, Siegler K, Anderson BS, Hunt JW, Tjeerdema RS, Holmes RW, Crane DB, Mekebri A, Connor V.
- 75.* 2007. Society of Environmental Toxicology and Chemistry (National Chapter – Milwaukee, WI). Statewide Investigation of the Role of Pyrethroid Pesticides in Sediment Toxicity in California's Urban Waterways. Published abstract with Anderson BS, Hunt JW, Tjeerdema RS, Holmes RW, Crane DB, Mekebri A, Connor V.
76. 2007. National Conference on Agriculture and the Environment (Pacific Grove, CA). Monitoring the Pesticide Mitigation Effectiveness of On-Farm Vegetated Treatment Systems. Published abstract with Hunt JW, Anderson BS, with Clark SL, Voorhees, Tjeerdema RS, Largay B, Beretti M, Brown K, Hanson E, Schafer R, Bern A, Sahl E, Worcester K.
- 77.* 2008. Society of Environmental Toxicology and Chemistry (National Chapter – Tampa, FL). Effectiveness of Pesticide Removal Using On-Farm Vegetated Treatment Systems and Landguard-OP-A. Published abstract with Clark SL, Voorhees, JP, Siegler K, Anderson BS, Hunt JW, Tjeerdema RS, M. Beretti, R. Shihadeh, A. Bern, R. Antinetti, C. Clarke.
78. 2008. Society of Environmental Toxicology and Chemistry (National Chapter – Tampa, FL). Watershed-scale Evaluation of Agricultural Best Management Practice Effectiveness in Three California Estuaries. Siegler, CS, Phillips, B, Anderson, B, Hunt, J, Voorhees, J, Clark, S, Tjeerdema, R, Smalling, K, Kuivila, K, Adams, M.
79. 2008. Society of Environmental Toxicology and Chemistry (National Chapter – Tampa, FL). Assessment of Phase II Sediment Toxicity Identification Evaluation (TIE) Methods for Freshwater Whole Sediment and Interstitial Water. B.M. Phillips, B.S. Anderson, J.W. Hunt, S.L. Clark, J.P. Voorhees, R.S. Tjeerdema, Casteline, J, Stewart, M.
- 80.* 2009. Salmon Restoration Federation Conference (Santa Cruz, CA). Impacts of agricultural pesticides in central coast rivers and estuaries: practices to reduce concentrations of organophosphate and pyrethroid pesticides. Anderson, BS, Phillips, BM, Hunt, JW, Tjeerdema, RS, Voorhees, JP, Siegler K.

EXHIBIT F
Standard Agreement

81. 2009. Society of Environmental Toxicology and Chemistry (National Chapter – New Orleans, LA). Occurrence and effects of current-use pesticides in three central California coastal estuaries. Smalling KL, Orlando, J, Phillips, BM, Siegler, K, Anderson, BS, Hunt, JW, Kuivila, K,
82. 2009 Society of Environmental Toxicology and Chemistry (Northern California Chapter – Davis, CA). Preliminary Results of the Santa Maria River/Oso Flaco Creek TMDL Monitoring Study. B.M. Phillips, B.S. Anderson, J.W. Hunt, S.L. Clark, J.P. Voorhees, K. Siegler, R.S. Tjeerdema, K. McNeil.
- 83.* 2010. American Chemical Society (National Meeting – San Francisco, CA). Effectiveness of Pesticide Removal Using On-Farm Vegetated Treatment Systems and Landguard-OP-A. Published abstract with Phillips, B.M., Hunt, JW, Siegler, C, Voorhees, JP, Tjeerdema, RS, Largay, B, Robins, P, Shihadeh, R, Antinetti, R.
84. 2010. American Chemical Society (National Meeting – San Francisco, CA). Potential impacts of pyrethroid pesticides on the marine environment. Phillips, BM, Anderson, BS, Hunt, JW, Voorhees, JP, Siegler, CS, Tjeerdema, RS.
85. 2010. Katie's ACS American Chemical Society (National Meeting – San Francisco, CA). Watershed-scale Evaluation of Agricultural Best Management Practice (BMP) Effectiveness in Three California Estuaries. Siegler, CS, Phillips, BM, Anderson, BS, Smalling, K, Hunt, JW, Kuivila, K, Voorhees, JP, Adams, M, Tjeerdema, RS.
- 86.* 2010 Society of Environmental Toxicology and Chemistry (National Chapter – Portland, OR). Impacts associated with pesticides in three central California estuaries. Anderson, BS, Phillips, BM, Smalling, K, Hunt, JW, Siegler, CS, Kuivila, K, Adams, M, Tjeerdema, RS
87. 2010 Society of Environmental Toxicology and Chemistry (National Chapter – Portland, OR). Santa Maria River/Oso Flaco Creek (California, USA) TMDL Monitoring Study. Phillips, BM, Anderson, BS, Hunt, JW, Voorhees, JP, Siegler, K, Tjeerdema, RS, McNeill, K.
88. 2010 Evaluation of test methodologies for detecting endocrine disruption in *Pimephales promelas* exposed to sewage effluent and agricultural runoff. Siegler, K., Anderson, B., Phillips, B., Hardin, D., Voorhees, J., De Haro, H., McCann, M., Tjeerdema, R.

*Anderson first author.

EXHIBIT F
Standard Agreement

81. 2009. Society of Environmental Toxicology and Chemistry (National Chapter – New Orleans, LA). Occurrence and effects of current-use pesticides in three central California coastal estuaries. Smalling KL, Orlando,J, Phillips, BM, Siegler, K, Anderson, BS, Hunt, JW, Kuivila, K,
82. 2009 Society of Environmental Toxicology and Chemistry (Northern California Chapter – Davis, CA). Preliminary Results of the Santa Maria River/Oso Flaco Creek TMDL Monitoring Study. B.M. Phillips, B.S. Anderson, J.W. Hunt, S.L. Clark, J.P. Voorhees, K. Siegler, R.S. Tjeerdema, K. McNeil.
- 83.* 2010. American Chemical Society (National Meeting – San Francisco, CA). Effectiveness of Pesticide Removal Using On-Farm Vegetated Treatment Systems and Landguard-OP-A. Published abstract with Phillips, B.M., Hunt, JW, Siegler, C, Voorhees, JP, Tjeerdema, RS, Largay, B, Robins, P, Shihadeh, R, Antinetti, R.
84. 2010. American Chemical Society (National Meeting – San Francisco, CA). Potential impacts of pyrethroid pesticides on the marine environment. Phillips, BM, Anderson, BS, Hunt, JW, Voorhees, JP, Siegler, CS, Tjeerdema, RS.
85. 2010. Katie's ACS American Chemical Society (National Meeting – San Francisco, CA). Watershed-scale Evaluation of Agricultural Best Management Practice (BMP) Effectiveness in Three California Estuaries. Siegler, CS, Phillips, BM, Anderson, BS, Smalling, K, Hunt, JW, Kuivila, K, Voorhees, JP, Adams, M, Tjeerdema, RS.
- 86.* 2010 Society of Environmental Toxicology and Chemistry (National Chapter – Portland, OR). Impacts associated with pesticides in three central California estuaries. Anderson, BS, Phillips, BM, Smalling, K, Hunt, JW, Siegler, CS, Kuivila, K, Adams, M, Tjeerdema, RS
87. 2010 Society of Environmental Toxicology and Chemistry (National Chapter – Portland, OR). Santa Maria River/Oso Flaco Creek (California, USA) TMDL Monitoring Study. Phillips, BM, Anderson, BS, Hunt,JW, Voorhees, JP, Siegler, K, Tjeerdema, RS, McNeill, K.
88. 2010 Evaluation of test methodologies for detecting endocrine disruption in *Pimephales promelas* exposed to sewage effluent and agricultural runoff. Siegler, K., Anderson, B., Phillips, B., Hardin, D., Voorhees, J., De Haro, H., McCann, M., Tjeerdema, R.

*Anderson first author.

EXHIBIT F Standard Agreement

Instruction, Invited Presentations, and Workshops

Invited participant (September 1996, Seattle WA): US National Oceanic and Atmospheric Administration workshop on sediment quality assessment.

Invited Participant (September 1997, Pellston, MI): Society of Environmental Toxicology and Chemistry workshop on Whole Effluent Toxicity

Invited Instructor (July 1998, San Diego, CA): Society of Environmental Toxicology and Chemistry/ US EPA course on Whole Effluent Toxicity

Invited Participant (May 2000, Pensacola FL): Society of Environmental Toxicology and Chemistry Pellston Workshop on Sediment Porewater Toxicity

Invited Instructor (October 2000, Long Beach, CA): Workshop on Collection, Analysis, and Interpretation of Sediment Quality Data. Presented by the Southern California Coastal Water Research Project, The San Diego Regional Water Quality Control Board, The Santa Ana Regional Water Quality Control Board, and the Los Angeles Regional Water Quality Control; Board

Invited Speaker (Nov. 2000, Sacramento, CA): California Aquatic Bioassessment Workgroup meetings, "Ecotoxicology of agriculture drainwater on the Salinas River"

Invited Instructor (January 2001, Salinas, CA): University of California Cooperative Extension Farm Short Course, "Impacts of agricultural drain water in Salinas River ecosystem"

Invited Speaker (June 2001, Moss Landing, California): Science Advisory Group on Sediment Quality Assessment (Eleventh Annual Meeting) "Sensitivity comparison of sediment bioassays using *Ampelisca abdita* and *Eohaustorius estuarius* in the West Coast EMAP program".

Invited panelist (October 15-17, 2001; Orange County, CA). Workshop on storm water monitoring and assessment in Southern California. Convened by the Southern California Storm Water Coalition.

Invited Speaker (Nov. 2001, Sacramento, CA). California Aquatic Bioassessment Workgroup meeting, "Evidence of pesticide impacts on macroinvertebrate communities in the Salinas River"

Invited Speaker (December 2001, Woodland CA). Sacramento River Monitoring Project meeting, "Impacts of agriculture drainwater in the Salinas River".

EXHIBIT F
Standard Agreement

- Invited Speaker (April 2002, Sacramento, CA). State Water Control Board Total Maximum Daily Load pesticide workgroup. "Issues concerning pesticide contamination of sediments and impacts on benthic communities".
- Invited Speaker (August 2002, Sacramento, CA). Department of Pesticide Regulation. Pesticide contaminated freshwater sediments: Overview of issues and results of recent State Water Board investigations.
- Session Chair (Nov. 2002, Society of Environmental Toxicology and Chemistry – SETAC, Salt Lake City, UT): Contaminated Sediments session.
- Invited Speaker (December 2002 – Sacramento, California). California Aquatic Bioassessment Workgroup meeting, "Integrated assessments of pesticide impacts on coastal rivers in central California".
- Invited Speaker (December 2002 – Sacramento, California). California Water Institute. "Integrated assessment strategies for determining impacts of agricultural wastewater".
- Invited Speaker (March 2003, San Luis Obispo, CA). Central Coast Regional Water Quality Control Board- Workshop on Agriculture Water Quality Monitoring Waiver Program. "Monitoring recommendations to assess impacts of agriculture wastewater".
- Invited Speaker (April 2003, San Diego, CA). San Diego Regional Water Quality Control Board Workshop on Total Maximum Daily Load studies of sediment hotspots. "Summary of San Diego Bay TMDL Phase I study plans".
- Invited Speaker. (May 2003, Berkeley, CA). San Francisco Estuary Institute/San Francisco Regional Water Quality Control Board – San Francisco Bay Regional Monitoring Program Annual Meeting. "A 10 year summary of sediment toxicity results for the San Francisco Bay Regional Monitoring Program".
- Invited Speaker (February 2004, Moss Landing, CA). Monterey Bay Aquarium Research Institute/ US Environmental Protection Agency – Central Coast Water Quality Monitoring Workshop. "Integrated assessment strategies for determining impacts of agriculture wastewater".
- Invited Speaker (March 2004, Monterey California, CA). Monterey Bay National Marine Sanctuary - Sanctuary Currents Symposium, 2004. "Non-Point source pollution around the bay: examples of sources and solutions".

EXHIBIT F
Standard Agreement

Invited Speaker (April 2004, Woodland, CA). First Annual University of California Pesticides Water Quality Workshop. "Examples of agricultural pesticide impacts on coastal rivers of central California".

Invited Speaker (June 2004, Santa Cruz, CA). Save Our Shores – Mountains to Marine Reserves. "Watersheds and marine reserves: the water quality connection".

Invited Speaker (January 2005, Salinas CA). UC Cooperative Extension Farm Water Quality Planning short course. "Effects of Agricultural Pesticides in Salinas Valley Watersheds: some local examples".

Session Chair (Nov. 2006, Society of Environmental Toxicology and Chemistry – SETAC, Montreal, Quebec, Canada): Sediment Toxicity Identification Evaluations session.

Invited Speaker (June 2007, San Luis Obispo CA). UC Cooperative Extension Farm Water Quality Planning short course. "Pesticide transport and vegetated treatment systems".

Invited Speaker (June 2007, Watsonville, CA). UC Cooperative Extension Farm Water Quality Planning short course. "Pesticide transport and vegetated treatment systems".

Invited Speaker (January 2009, Moss Landing, California). Elkhorn Slough National Estuarine Research Reserve. Relative contamination and toxicities of sediments from Tembladero Slough, Elkhorn Slough and the Pajaro River.

Invited Speaker (February 2009, Sacramento, California). California Department of Pesticide Regulation seminar. Reduction of pesticides and toxicity in agriculture runoff using vegetated treatment systems and Landguard OP-A.

Invited Speaker (March 2009, San Luis Obispo, California). California Regional Water Quality Control Board workshop. Reduction of pesticides and toxicity in agriculture runoff using vegetated treatment systems and Landguard OP-A.

Invited Speaker (April 2009, Soledad, California). Central Coast Agriculture Technical Panel participant. Pesticides Causing Toxicity, Potential Treatment Methods, and Future Research Topics

Invited Speaker (April 2009, Salinas, California). Monterey County Resource Conservation District Workshop on Agriculture and Management Practices. Effectiveness of Vegetated Treatment Systems.

Invited Speaker (October 2009, Moss Landing, California). Watersheds, Water Quality, and a Changing Climate. Symposium organized by the Monterey National Marine

EXHIBIT F Standard Agreement

Sanctuary. Impacts of Urban and Agricultural Chemicals on Central Coast Watersheds, and Practices to Reduce Contaminant Runoff.

Invited Speaker (July 2011, Sacramento, California). California Department of Pesticide Regulation seminar. The Stream Pollution Trends Monitoring Program, A framework for monitoring long-term trends in California watersheds.

Invited Speaker (October 2011, Oakland, Ca). San Francisco Estuary Institute RMP annual meeting.

Invited Speaker (October 2011, Webinar). State Water Resources Control Board – Citizen Monitoring Network. The Stream Pollution Trends Monitoring Program, A framework for monitoring long-term trends in California watersheds.

Committees

2000 –2001: Served on Sediment Quality Monitoring Project Re-Design Committee for San Francisco Estuary Institute SF Bay Regional Monitoring Program for Trace Substances.

2001: Served on Design Integration Workgroup for San Francisco Estuary Institute SF Bay Regional Monitoring Program for Trace Substances.

June 2000 -2004: Serving on Chualar Creek Pilot Monitoring Project Technical Advisory Committee. Established by the Central Coast Regional Water Quality Control Board and the California Farm Bureau.

June 2001- on going: Member of the National Science Advisory Group on Sediment Quality Assessment.

May 2002 -2005: Coordinator for the State Water Resources Control Board's Aquatic Pesticide Monitoring Program's Toxicity Workgroup.

May 2003-2005: Member of the State Water Resources Control Board's Aquatic Pesticide Monitoring Program's Bioassessment Workgroup.

December 2003 – 2005. Member of Technical Advisory Committee for PGE settlement funds monitoring project.

2003 – 2004. American Society for Testing and Materials (ASTM): Amphipod toxicity test guideline review committee member.

EXHIBIT F
Standard Agreement

2003 – 2009. Scientific Advisory Committee Member for State Water Resources Control Board Sediment Quality Objective development program.

2005 – present. San Francisco Estuary Institute Regional Monitoring Program – Exposure and Effects Workgroup and Toxicity Workgroup advisory committees

2007 – present. Reg 3 Ag Waiver Program technical advisory committee.

October 2007. Review of PWG proposal for the State Water Resources Control Board – Syed Ali

2008-2010. Science Advisory Panel: Produce Safety Project – Co-Managing for food safety and ecological health in California's central coast region.

December 2011 – January 2012. Science Advisory Panel: Review of methods for characterizing effects of pesticides and other chemical stressors to aquatic organisms. U.S. EPA Office of Pesticide Programs.

Editorial Board

Bulletin of Environmental Contamination and Toxicology

