DRAFT

BEAD Labs Re-compete Mission Contract
Statement of Work
February 25, 2003

1. BACKGROUND:

The Environmental Protection Agency (EPA) requires the registration of all pesticides manufactured for use in the United States. The EPA Office of Pesticide Programs (OPP) has recently announced new Data Reporting Guidelines (DRGs) for Analytical Methods required for the registration of pesticide compounds, and many of these Methods are being forwarded to OPP's Environmental Chemistry Laboratory (ECL), Analytical Chemistry Laboratory, and Microbiology Laboratory for review and written evaluation, followed by laboratory evaluation of those methods meeting evaluation criteria for the written method. The Biological and Economic Analysis Division (BEAD) Laboratories expect to receive five hundred to one thousand of these methods from the registrants over the next five years. Technical assistance is required to perform many of these written and laboratory evaluations. Those methods meeting laboratory performance criteria shall require formatting to meet requirements for distribution of the methods to interested users by both hardcopy and electronic means.

The OPP is charged with technical support to the numerous State and other EPA pesticide laboratories which support the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the newly enacted Food Quality Protection Act of 1996. This support includes quality assurance and audits, technical training workshops, and analytical support to States through analysis of samples, duplicates, and confirmation of residues. Additional support to the States includes distribution of validated methods. The OPP requires technical assistance to implement or continue support in these areas.

2. GENERAL REQUIREMENTS:

The requirements contained in this statement of work are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. *The Agency will monitor the contractor's performance in accordance with the Quality Assurance*

Surveillance Plan as described in Section 4.

Under this statement of work, the Government defines the desired outcome and, in turn, the contractor proposes the most efficient methods to achieve results that fulfill the desired outcome. Typical areas that are measured include cost control, timeliness and completeness of deliverables, problem resolution, business relations, quality of work performed, and whether or not the deliverable assists the Agency in meeting its objectives and goals as identified in the tasks.

In cases where Performance Objectives and minimum Acceptable Quality Levels (AQLs) are not being met, the contractor will make every effort to immediately correct the problem to ensure customer satisfaction. If the problem is systemic, the contractor will submit a plan of corrective action to the Project Officer (PO)/Alternate Project Officer (APO).

The required services will be specified through Work Assignments issued by the Contracting Officer (CO) and technically managed by the PO/APO and Work Assignment Manager (WAM). The tasks within this contract are: 1) Analytical Method Reviews; 2) Laboratory Method Validations; 3) Laboratories Method Indices; 4) Inter-Lab State QA Program Support; 5) Pesticide Training Workshops for State Labs; 6) Search for Pesticide Testing Methods and Develop Test Parameter Guidance; 7) Prepare Media, Reagents, Diluents, and Glassware for Testing Microbial Pathogens; 8) Support EPA National Pesticide Repository; 9) Provide Quality Control Services On-Site to OPP's Microbiology Laboratory; 10)Provide Microbiological Testing Support for the Antimicrobial Test Program and 11) Design, Develop and Implement Analytical Laboratory projects to Support Intra-and Inter-Agency Pesticide Programs.

3. SPECIFIC TASKS:

Task 1: Analytical Method Reviews

The contractor shall review pesticide analytical methods submitted to OPP through the registration and reregistration process, as well as methods from other sources. These methods will consist of, but are not limited to:

- environmental chemistry residue methods
- residue methods for foods
- methods to determine percent active ingredient in formulated products and technical materials
- plant incorporated methods.

These methods will test the following, including but are not limited to, soil, water, sediment, plants, fruit, vegetables, animal tissue, air, and human tissue and fluids and pesticide products. These methods shall be reviewed using standard operating procedures (SOPs) provided by the PO/APO or WAM including but not limited to standard evaluation procedures (SEPs), evaluation checklists, and prescribed report formats. Analytical methods for approximately 20-30 products are reviewed on an annual basis.

In many cases, the contractor shall provide reports that compare analytical performance of registrant's methods versus an independent lab validation (ILV). In other cases, the contractor shall provide written method reviews comparing new residue analytical methods from proposed new uses to previously validated methods for older uses.

DELIVERABLES:

1) Draft written report including completed checklists on the results from each method review shall be submitted to the PO/APO or WAM within the timeframe as specified in the Work Assignment.

2) Final written report evaluations incorporating any changes provided by the PO/APO or WAM shall be submitted within the timeframe as specified in the Work Assignment.

ACCEPTANCE CRITERIA:

- The draft and final reports shall be submitted within the timeframe as specified in the Work Assignment. The reports will include a completed checklist on the results from each method reviewed. The report will completely address all of the required objectives, issues, deliverables, and schedules as specified in the Work Assignment.

Task 2: Laboratory Method Validations

The contractor shall independently test/lab validate pesticide analytical methods submitted

to OPP through the registration and reregistration process, as well as methods from other sources. The methods will be provided by the PO/APO or WAM who will designate priorities for the lab validations. These methods will consist of, but are not limited to:

- pesticide environmental chemistry residue methods
- pesticide residue methods for foods
- methods to determine percent active ingredient in formulated products and technical materials
- plant incorporated pesticide methods

These lab validations will help determine the adequacy of these methods for use by Federal and State Pesticide enforcement labs to gather pesticide monitoring data to enforce established tolerances, and also provide additional support to State/EPA efforts to validate enforcement methods for use by State enforcement labs to verify label warranty claims. These methods will test, but are not limited to, soil, water, sediment, plants, fruit, vegetables, animal tissue, air, registered products, and human tissue and fluids. Analytical methods are validated for approximately10 products on an annual basis.

2.1 Acquisition of All Materials - Chemicals, Standards, & Equipment for Testing

The analytical methods increasingly employing state-of-the-art analytical approaches. The contractor shall use the following technologies in laboratory testing, including but not limited to:

- immunoassay
- liquid chromatography/mass spectrometry (LC/MS)
- gas chromatography/mass spectrometry (GC/MS) and GC/MS/MS
- capillary electrophoresis
- GC, HPLC with conventional detectors for pesticide analyses

The contractor shall be prepared to start work within sixty (60) days of receiving a Work Assignment to employ both conventional and newer instrumentation and technology as described above. The Contractor shall also obtain fully-characterized matrix control materials, as well as analytical standards, reagents, supplies, equipment, and other resources necessary for all methods

tested.

2.2 Preliminary Testing to Establish the Methods

The Contractor shall conduct preliminary testing to establish the method, including analytical techniques, detection limits, linearity and calibrations. Appropriate quality assurance/quality control (QA/QC) shall be incorporated into each set of samples, and the methods shall be tested exactly as written without modification. If at any point in the methods testing, the method fails to meet the performance requirements or DQO, the Contractor shall inform the PO/APO or WAM to determine the appropriate course of action. Those actions may include a call to the Registrant by the PO/APO or WAM with a status report of the methods testing and difficulties encountered. The PO/APO or WAM will provide specific guidance and recommendations for subsequent disposition of the method's testing or reports. No contractor employee involved in this testing shall contact the Registrant or other method owner without specific approval of the Project Officer or Alternate Project Officer.

2.3 Completion of the Validation Analysis

The contractor shall submit a completion analysis of the entire range of concentrations of the analyses as determined by the PO/APO or WAM in the Work Assignment to the PO/APO or WAM if the method meets the performance requirements and Data Quality Objectives (DQOs) as set forth in the SOPs/Protocols and related addenda. If at any point in the methods testing, the method fails to meet the performance requirements or DQO, the Contractor shall inform the PO/APO or WAM to determine the appropriate course of action. Those actions may include a call to the Registrant by the PO/APO or WAM with a status report of the methods testing and difficulties encountered. The PO/APO or WAM will provide specific guidance and recommendations for subsequent disposition of the method's testing or reports.

2.4 Draft Reports for Methods Tested

The Contractor shall develop and submit a draft report documenting the results of the

laboratory testing for each method tested. This report shall address performance of the method and include discussions on method detection limits, limits-of-quantitation, precision, accuracy, specificity, interferences, linearity, and other points identified in the SOPs/Protocols. Additionally, the Contractor shall indicate if the method is practical and rapid and report the time required to carry out analyses on a given number of samples. The Contractor shall note any limitations, deficiences, or potential sources of error found in the method. The Contractor shall also secure and maintain archive files of these methods tests, including original instrument outputs. The PO/APO or WAM will review this draft report and will identify specific items that need to be corrected.

2.5 Final Reports for Methods Tested

The Contractor shall develop and submit a final report documenting the results of the laboratory testing for each method tested with corrections to items identified by the PO/APO or WAM in section 2.4.

DELIVERABLES:

1) Completion of the lab validation and submission of draft report within the timeframe as specified in the Work Assignment.
2) Completion and submission of final report within the timeframe as specified in the Work Assignment.

ACCEPTANCE CRITERIA:

- The lab tests/validations and final reports shall be done by EPA established standard operating procedures (SOPs) or protocols including all necessary QA aspects. The Contractor shall follow EPA guidelines for independent laboratory testing (see OPP 00405; FRL 4953.5; 04/19/95; PR Notice 96-1, February 7, 1996), adhere to FIFRA Good Laboratory Practices (GLPs; 40 CFR, part 160)

and follow other applicable SOPs as provided by the PO/APO or WAM.

- The draft and final reports shall be submitted within the timeframe as specified in the Work Assignment.

Task 3: Support to BEAD Laboratories' Method Indices

The OPP/BEAD laboratories scan pesticide methods into e-files and list the pesticide method indices on the OPP Web Site for customers to retrieve pertinent methods for their analytical work. Currently, the posted indices consist of ~ 350 environmental chemistry method packages (ECMs) for soils and water, ~650 residue analytical method packages for foods and antimicrobial testing methods and procedures. Soon ~125 product chemistry method packages will be posted on the same web site.

3.1 Scan the Pesticide Methods

The PO/APO or WAM will provide hardcopies of the analytical method packages to be scanned by the Contractor. The analytical method packages include but is not limited to the analytical method, the final report, the addendum, and the independent lab validation. The contractor shall manually review the hardcopies to ensure scanning without errors and scan the methods into e-files.

3.2 Process Customer Requests for Methods

_____ The contractor shall receive requests for analytical methods from customers on the EPA web site, determine if method needs to be scanned, scan the method if necessary, and e-mail required methods to customers. The contractor will track the incoming requests by making hard copies of the request and filing them in a notebook, completing and filing request forms, and entering the information from the request form into a lotus approach database. The information extracted from each request form includes but is not limited to: order #, project #, date order received, address, e-mail address, organization, commodity, and pesticide name.

DELIVERABLES:

1) Pesticide analytical method packages shall be reviewed and scanned into the e-file system within the timeframe as specified in the Work Assignment.

2) Respond to all "e-mail" requests from customers in e-files within 2 working days of receipt.

3) Provide log of customers (names, affiliation, addresses) who have requested analytical methods weekly.

ACCEPTANCE CRITERIA:

All methods shall be reviewed and scanned completely and accurately and shall be legible. All requests for information shall be provided a response within 2 days of receipt. Logs of customers and information requested shall be complete and accurate. The electronic tracking system shall also be complete and accurate.

Task 4: Inter-Lab State QA Program Support

The contractor shall develop, implement and conduct proficiency check sample programs for state and federal pesticide laboratories working with OPP/BEAD labs in environmental, product/formulation, antimicrobial, and plant incorporated pesticide chemistry areas as well as in the microbiology area. The programs would include the federal and five state laboratories currently providing antimicrobial support, both in the microbiology and pesticide formulation chemistry areas and include up to 52 state FIFRA laboratories in the pesticide environmental residue area.

4.1 Preparation of Check Samples

The contractor shall prepare check samples of soil, water, foliage, wipe samples, and other designated matrices for the environmental program including but not limited to, samples containing human pathogenic organisms for use in enumeration and organism identification validations, media, sterility and pH verifications, spiked Genetically Modified Organism (GMO)

materials, contaminated food and environmental samples, and other microbiological matrices used to verify accuracy and reliability of data and laboratory performance. The designated matrices shall be spiked with levels of preselected pesticide(s) and shall be pre-analyzed to verify stability of the pesticide(s) and homogeneity/uniformity of the spiking level(s) throughout the sample matrix. The contractor shall also prepare reference standards for antimicrobial efficacy testing. Draft and final reports shall be submitted by the contractor to the PO/APO or WAM upon completion of each check sample.

4.2 Develop Plan for Check Sample Exercise Program

The Contractor shall develop a Plan for implementing and conducting a check sample exercise program to support quality assurance (QA) work at State, and some federal laboratories. Guidance for this Plan shall come from the PO/APO or WAM, EPA experienced-based approaches and protocols, initial assessments of State laboratory requirements, ideas suggested from the State AAPCO Steering Committee, the Contractor's successful experience-based approaches, and widely accepted approaches supported by the American Chemical Society (ACS), the AOAC International, and other standard setting organizations. The Plan must be approved by the PO/APO or WAM. The Plan shall address methods and procedures for:

- obtaining certified standard materials
- confirming identities of the analytes
- preparing and verifying the concentrations of standards and spiking solutions
- distribution of the standards or solutions
- reporting of results from participating laboratories
- statistical methods and criteria for evaluating and reporting these results
- documentation of all information
- safe handling and shipping of reference and spiking materials.

Initial assessments and determination of specific laboratory requirements shall be accomplished through teleconferences, with the AAPCO Steering Committee, attendance at State-Federal meetings, and on-site visits to selected laboratories. The Contractor shall incorporate this information into the Plan. The Contractor, in consultation with the PO/APO or WAM, shall

develop a schedule for conducting these exercises and append it to the Plan.

4.3 Conduct Check Sample Exercise Program

The Contractor shall plan to eventually conduct **two to four exercises each year**. The Contractor shall provide reports to each participating state on their results from these exercises including analytical methodology, in-house QA/QC, and statistical evaluations. *(To be developed further at a later date.)*

Work Approach

In gathering information, conducting interviews, or performing research, the contractor shall identify himself/herself as a contractor to EPA, not an EPA employee. The contractor shall not interpret EPA policy on behalf of EPA nor make decisions on matters of policy, regulation, or statute.

DELIVERABLES:

1) Prepare Check Samples within the timeframe as specified in the Work Assignment.
2) Deliver draft and final reports on prepared check samples within the timeframe as specified in the Work Assignment.
3) Provide draft Check Sample plans, to be received by the PO/APO or WAM within the timeframe as specified in the Work Assignment. EPA will provide comments on the draft exercise plans within ten working days of receipt.
4) Final Check Sample Plan to be received within the timeframe as specified in the Work Assignment.
5) Conduct Check Sample Exercise Program within the timeframe as specified in the Work Assignment.

ACCEPTANCE CRITERIA:

The draft and final reports shall be submitted within the timeframe as specified in the Work Assignment. The draft check sample plans shall be delivered and check sample

exercise programs shall be conducted within the timeframe as specified in the Work Assignment. The final report will completely address all of the required objectives, issues, deliverables, and schedules as specified in the Work Assignment.

Task 5: Pesticide Training Workshops for State Labs

The Contractor shall arrange and conduct workshops to train state personnel on current pesticide methods and issues. The training shall cover areas of pesticide product chemistry methods, microbiological test methods, food and environmental residue methods, and other designated methods that may be under review by OPP. Other topics for the workshops are new analytical techniques or technologies including state-of-the-art and emerging instrumentation, quality assurance, quality control practices and principles, hands-on laboratory exercises and demonstrations, and new or updated regulatory issues.

5.1 Develop Workshop Plans & Agenda

The Contractor shall develop plans and agenda for arranging and conducting two to three technical training workshops per year to respond to the needs of the State pesticide laboratories and other laboratory partners. Each workshop is expected to last for four to five days and to accommodate up to 15 to 20 attendees. Guidance on workshop topics and course content will be provided by the PO/APO or WAM from the results of the training surveys conducted by the Association of American pesticide Control Officials (AAPCO) and their Steering Committee for State Support Activities. The PO/APO or WAM will work with State pesticide laboratories to determine the location/host facility and possible dates for the workshop. As directed by the PO/APO or WAM, the contractor staff shall participate in periodic teleconferences with the AAPCO Steering Committee and with EPA laboratory staff.

The contractor shall begin planning and development for this workshop, with guidance and direction from the PO/APO or WAM. Inclusive in planning and development are:

- a site visit check list
- the site visit and report

- determination of topics and content for the workshop training
- laboratory and hands-on demonstrations
- format and agenda
- schedule.

The workshop plans shall be submitted to the PO/APO or WAM for review and comment.

5.2 Prepare Workshop Training Materials

The Contractor shall be responsible for providing knowledgeable *and capable instructors* and workshop staff for preparation of all workshop training materials including manuals, handouts and presentation media, and for obtaining training aids, equipment and supplies not otherwise available at the workshop sites. The training manuals and materials shall be submitted to the PO/APO or WAM for approval before being made final.

It shall be necessary for the contractor to videotape the "roundtable" discussion part of each workshop and prepare and distribute up to six copies of this discussion, suitable for viewing in a VCR, among state laboratories requesting copies. To complement the on-site training, the contractor shall, as requested, video tape the performance of techniques and analyses in the laboratory for purposes of disseminating this material. The contractor shall re-distribute these copies until all interested laboratories have had the opportunity to view the tape. The contractor shall make available by mail, to state labs requesting them, all methods demonstrated at the workshop. The estimate is that 20 to 25 laboratories may request these methods.

5.3 Administer Workshop Logistics

The Contractor shall handle administrative responsibilities associated with the workshops including but not limited to:

- Preparing an announcement and workshop brochure when dates, location, workshop topics and program are known and have been agreed to by the PO/APO or WAM
- Registration activities

- Providing information on local accommodations and on transportation
- Developing an evaluation form on which attendees may critically evaluate the workshop
- Coordinating the scheduling of the workshop's format
- Coordinating other on-site needs with representatives of the facility hosting the workshop
- Preparing a final report on the workshop, covering all workshop activities and the results of the evaluations, shall be prepared by the Contractor.

Guest speakers shall be arranged for, if necessary, and include experts in the field of pesticide analysis and closely related subject matter. (To be clarified at a later date)

Note: 1) The Contractor shall not arrange for accommodations or transportation under this contract, and 2) It is prohibited by law to use contract-appropriated funds to pay for travel, transportation, and subsistence expenses associated with meetings for individuals other than the contractor, sub-contractor, and their consultants.

DELIVERABLES:

1) The contractor shall provide the PO/APO or WAM with a workshop plan within timeframe as specified in the Work Assignment.

2) The contractor shall provide the PO/APO or WAM with workshop materials including but not limited to agenda, brochure, training manuals, evaluation forms, and draft and final reports covering all workshop activities within timeframe as specified in the Work Assignment.

ACCEPTANCE CRITERIA

The workshop plan, materials and draft and final reports shall be submitted in a timely manner and completely address all of the required objectives, issues, deliverables, and schedules for accomplishing this effort as specified in the Work Assignment.

Task 6: Support Development of Test Parameter Guidance

_____The contractor shall extract data on antimicrobial test conditions from the Agency's records using established procedures provided by the PO/APO or WAM in order to support the development of test parameter guidance. The parameters form the basis for enforcement testing and support activities at federal and state laboratories. Test parameters for approximately 75-120 products are developed on a annual basis.

6.1 Extraction of Antimicrobial Efficacy Testing Methods from Agency Records

The contractor shall extract data on antimicrobial test conditions from the Agency's records using established procedures for both hospital level efficacy and tuberculocidal claims on products provided by the PO/APO or WAM. The contractor shall obtain agency documents including but not limited to registration jackets, confidential statements of formula (CSFs), the latest accepted labels, and efficacy studies used for parent registrations. The contractor shall review the documents and extract into the draft Test Parameter Table (provided by the PO/APO or WAM) the following data including but not limited to:

- EPA Reg. No.
- Product
- Test Method
- Test Conditions
- Contact Time
- Neutralizer/Subculture Media
- Comments

The Test Parameter Table is finalized after PO/APO or WAM acceptance.

The contractor shall review and compare the test conditions found on the most recent product label with the test conditions found in the efficacy studies used for parent registrations. The contractor shall notify the PO/APO or WAM if discrepancies exist. The PO/APO or WAM may periodically arrange meetings to discuss discrepancies. The contractor shall be available to participate in Agency meetings at the discretion of the PO/APO or WAM. Confidential Business

Information (CBI) clearance is required.

6.2 Extraction of Product Chemistry Test Methods from Agency Records

The contractor shall obtain current product chemistry test methods on products provided by the PO/APO or WAM from the Agency's records, copy them, and deliver them to the PO/APO or WAM as specified in the Work Assignment.

6.3 Process Test Methods Requested from Individuals/Registrants

The contractor shall notify the PO/APO or WAM if chemistry test methods are not available in Agency records. The PO/APO or WAM will make arrangements to contact individuals or registrants requesting the methods. Upon receipt of the methods from registrants, the contractor shall process them as specified in the Work Assignment. Confidential Business Information (CBI) clearance is required.

DELIVERABLES:

1) Provide Test Parameter Table data to the PO/APO or WAM with the timeframe as specified in the Work Assignment.
2) Provide copies of the product chemistry test methods within the timeframe as specified in the Work Assignment.
3) Process test methods requested from individuals/registrants within the timeframe as specified in the Work Assignment.

ACCEPTANCE CRITERIA:

The test parameter table data and copies of the product chemistry test methods shall be submitted within the timeframe as specified in the Work Assignment and shall completely address all of the required objectives, issues, deliverables, and schedules as specified in the Work Assignment.

Task 7: Media, Reagents, Diluents, and Glassware Preparation for Antimicrobial Product Testing

The contractor shall provide on-site support for media, reagent, diluent and glassware preparation to the testing and research programs at the OPP Microbiology Laboratory using established procedures and practices. The PO/APO or WAM will provide Good Laboratory Practice (GLP) level documentation to support quality control practices. This task would require 2 persons per year.

7.1 Prepare Media and Reagents

The contractor shall prepare media and reagents used for testing and detection of human pathogenic microorganisms as specified in recipes from different sources including but not limited to AOAC and journal articles and complete associated Media/Reagent Preparation sheets. The contractor shall file and maintain the Media/Reagent Preparation sheets in notebooks located on-site. The Microbiology Lab currently prepares approximately 80 media/reagents per month.

7.2 Evaluate Media and Reagents

The contractor shall also perform and tabulate sterility and performance assessments as required for prepared materials including but not limited to glassware and pre-sterilized items and complete the associated Performance & Sterility Assessment sheets. The contractor shall file and maintain the Performance & Sterility Assessment sheets in notebooks located on-site. The contractor shall also monitor the components required for preparation of media and reagents and notify the the PO/APO or WAM when components are low at which time the PO/APO or WAM may direct the contractor to order additional supplies.

DELIVERABLES:

1) Preparation of media, reagents and glassware within the timeframe as specified in the

Work Assignment.

2) Complete Media/Reagent Preparation sheets within the timeframe as specified in the Work Assignment.

3) Evaluate media and regents within the timeframe as specified in the Work Assignment which includes conduct of sterility and performance assessments on reagents, glassware, media and pre-sterilized items.

4) Complete Performance & Sterility Assessment sheets within the timeframe as specified in the Work Assignment.

ACCEPTANCE CRITERIA

- The laboratory operations require strict adherence to sterility and performance requirements for all materials.
- Adherence to established quality control and assurance procedures is required.
- All procedures and documentation of the procedures and data are done following EPA established standard operating procedures (SOPs) or protocols including all necessary QA aspects. The Contractor shall follow EPA guidelines for independent laboratory testing (see OPP 00405; FRL 4953.5; 04/19/95), adhere to FIFRA Good Laboratory Practices (GLPs; 40 CFR, part 160 and follow other applicable SOPs as provided by the PO/APO or WAM..

Task 8: Support to EPA National Pesticide Repository

The Contractor shall provide the Analytical Chemistry Branch (ACB) on-site at the Environmental Science Center (ESC) support to the EPA National Pesticide Repository. The Repository currently prepares and ships ~4,000 pesticide standard aliquots/year to state and federal laboratories.

8.1 Log-In *Requests* for Pesticide Analytical Standards

The contractor shall log-in incoming requests for pesticide analytical standards. This includes completing the EPA National Pesticide Standard Repository Order Form and entering information from the order form into a database. The information extracted from the order form includes but is not limited to the date, index code number, compound name, lot # (location), date shipped, the laboratory code #, requestor's name, phone number, and fax number as well as laboratory mailing address for USPS deliveries.

8.2 Prepare, Package & Ship Requested Pesticide Analytical Standards

The contractor shall retrieve standards from appropriate refrigerators/freezers, weigh out aliquot(s), and package aliquot(s) for shipment to customers. Preparation of aliquot(s) includes confirming that the vial label is complete, confirming that the vial is the requested standard, wrapping the vial with paper, securing it with tape, and putting the wrapped vial in a pouch and heating the seal. The contractor shall also retrieve copies the following forms and place them in a designated box that must be properly labeled:

Material Safety Data Sheet (MSDS)
Certificate of Analysis (COA)
Blank EPA National Pesticide Standard Repository Order Form
Completed customer order form with date shipped completed

Each box must contain a customer mailing address, repository return address, USPS Priority Mail, and a small quantity exemption label.

8.3 Record Shipment

The contractor shall maintain records of the shipped aliquot(s) by annotating the order form on the lower right corner with the number of aliquots shipped and the date (am/pm). The contractor shall also complete a "Distribution of Pesticide Reference Standards" sheet and place it and the annotated order form into a "completed orders" folder, the information of which will be entered into a database.

8.4 Maintain Inventory of Standards

The contractor shall maintain the inventory of standards in the Laboratory. This includes ordering standards as specified by the PO/APO or WAM, logging-in standards and scanning associated receipt documents upon receipt of the standards, numbering the standards, and storing them in the refrigerator. The contractor shall also remove empty containers from repository inventory.

DELIVERABLES:

1) The tracking system and order forms must be completed within the timeframe as specified in the Work Assignment.
2) Customer orders must be filled within the timeframe as specified in the Work Assignment.
3) Add new or replacement standards to the inventory within the timeframe as specified in the Work Assignment.

ACCEPTANCE CRITERIA:

Procedures for performing these tasks will follow existing Repository SOPs provided by PO/APO or WAM.

TASK 9: On-Site Quality Control Services to the Microbiology Laboratory

The contractor shall provide quality control services to the OPP Microbiology Laboratory using established procedures and practices.

9.1 Front End Processing of Media, Reagents, and Supplies

The contractor shall assign control numbers to media, reagents, and supplies used for testing and detection of human pathogenic microorganisms and log them into a database or WP file. Media and reagent materials include but is not limited to bulk materials, chemicals, and glass

and plastic ware necessary to support the laboratory's ongoing operations.

9.2 Monitor Standard Equipment, Materials, & Environment

The contractor shall record temperatures for incubators, refrigerators, and storage areas in the Microbiology Laboratory and enter them into log books that are prepared and maintained manually and located on-site. The contractor shall monitor standard equipment including but not limited to pH meters, balances, automated dispensers and pipettes following established schedules and procedures and notify the PO/APO or WAM if equipment or materials are not performing according to specified parameters.

9.3 Maintain Operation of Standard Equipment & Materials

The contractor shall maintain, calibrate, and assure the operation of standard equipment including but not limited to pH meters, balances, automated dispensers and pipettes following established schedules and procedures. The contractor shall also perform other quality control services including but not limited to glass washing and detergent residue testing, deionized water parameters, and performance verification of autoclaves.

9.3 Track Prepared Media, Reagents, and Supplies

The contractor shall assign preparation or prep numbers to media and reagents that have been prepared and sterilized for use in the testing and research programs at the OPP Microbiological Laboratory. As the media and reagents are used in Laboratory, the contractor shall track their use as specified in the WA, notify the PO/APO or WAM when media, reagents, and supplies are low as specified in the WA, and identify media and reagents due to expire in 30 days using written logs and/or databases.

9.4 Archive and Retain Records On-site

The contractor shall archive and retain records on-site following established procedures provided by the PO/APO or WAM.

DELIVERABLES:

1) Monitor and calibrate equipment following established schedules and procedures within the timeframe as specified in the Work Assignment.

2) Maintain operation of equipment and materials following established schedules and procedures within the timeframe as specified in the Work Assignment.

3) Track media and reagents used in the Laboratory following established schedules and procedures within the timeframe as specified in the Work

4) Archive and retain records on-site within the timeframe as specified in the Work Assignment.

ACCEPTANCE CRITERIA:

- All procedures and documentation of procedures and data are done following EPA established standard operating procedures (SOPs) or protocols including all necessary QA aspects. The Contractor shall follow EPA guidelines for independent laboratory testing (see OPP 00405; FRL 4953.5; 04/19/95), adhere to FIFRA Good Laboratory Practices (GLPs; 40 CFR, part 160 and follow other applicable SOPs as provided by the PO/APO or WAM.
- All entries into logs must be 100% accurate and legible with correct notations for entry errors and entry omissions.

TASK 10: Efficacy Testing Support

The contractor shall provide support for OPP's post-registration efficacy testing of hospital disinfectants. The contractor will be required to use standard AOAC-International methodologies to determine the efficacy of antimicrobial products with claims against human pathogenic organisms (e.g. Staphylococcus aureus, Pseudomonas aeruginosa, Mycobacterium bovis BCG). Various liquid, spray, and towelette formulations may be tested depending on the Agency's sample collection priorities. It is anticipated that 10-15 products will be evaluated per

year.

10.1 Develop Study Protocols

The contractor shall periodically provide an updated testing schedule and a study protocol for each product tested as specified in the WA.

10.2 Testing Support

The contractor shall provide testing support by conducting the AOAC Use Dilution Method, AOAC Confirmative In Vitro Test for Determining Tuberculocidal Activity, AOAC Germicidal Spray Products Test, and a modified AOAC Germicidal Spray Products Test for Towelette Products. The contractor shall conduct the testing per the product type collected and report the results using established procedures. Product sample collection and distribution are provided by the PO/APO or WAM. Ancillary tests such as determining carrier counts and neutralization confirmation will also be conducted per OPP SOPs.

10.3 Provide Draft & Final Product Performance Report

The contractor shall provide draft and final product performance reports for each product tested as specified in the WA. In addition, a Biological Report of Analysis (EPA Hq Form 8510-14) shall be prepared for each product sample analyzed.

DELIVERABLES:

1) Provide the testing schedules and study protocols for each product test within the timeframe as specified in the Work Assignment.

2) Provide draft and final Product Performance Reports, BRAs, with accompanying quality assurance documentation to the PO/APO or WAM within the timeframe as specified in the Work Assignment.

3) Provide Chain of Custody (COC) documentation within the timeframe as specified in the Work Assignment.

4) Provide sample retention as required within the timeframe as specified in the Work

Assignment.

ACCEPTANCE CRITERIA:

The lab tests and final reports shall be done by EPA established standard operating procedures (SOPs) or protocols including all necessary QA aspects. The Contractor shall follow EPA guidelines for independent laboratory testing (see OPP 00405; FRL 4953.5; 04/19/95), adhere to FIFRA Good Laboratory Practices (GLPs; 40 CFR, part 160 and follow other applicable SOPs as provided by the PO/APO or WAM.

Task 11: Special Analytical Projects Support of Intra-and Inter-Agency Pesticide Programs

The contractor shall design, develop and implement pesticide analytical projects in support of OPP Divisions, other EPA Offices including Regions, States and other U.S. and international governmental offices. As the requests for support come in, the PO/APO or WAM will issue a Work Assignment specifying the type of program involved, nature of support requested, and the urgency of the support. The Contractor shall provide support that may vary from rapid turnaround, small projects with a few samples to large monitoring studies involving hundreds of samples over longer periods of time.

11.1 Analytical Support Work

Analytical work anticipated to support EPA Regions, states, and other EPA and governmental pesticide programs. The contractor shall perform the following tasks including but not limited to :

- Backup sample analyses
- Duplicate and confirmational analyses

Analytical work on these smaller projects should involve no more than 25-50 samples.

For this task the contractor shall expect to use state-of-the-art techniques/equipment/instrumentation such as immunoassay, gas chromatographs (GCs), high

performance liquid chromatographs (HPLCs), GC/MS, HPLC/MS, ASE, SFE, etc. Matrices, which are of interest are, but not limited to, soil, water, plants, wildlife, air, human tissues, fluids, clothing, food commodities, registered products, and household and farm apparatus, such as equipment supporting mixing, application and disposal of pesticides and pesticide solutions.

The contractor shall prepare complete study plans and complete reports of analytical work on each project and maintain secure archived files, including analytical data and instrument outputs. Final results shall be forwarded to the customers through the PO/APO or WAM.

11.2 Monitoring & Enforcement Studies

The contractor shall provide technical support for monitoring and enforcement studies that includes but is not limited to collecting pesticide residue data for OPP Divisions to make informed regulatory decisions and determining the impact of exposure to one or more pesticides for human and ecological exposure studies that may include:

- field dissipation and accumulation
- soil metabolism, mobility, hydroysis and photolysis
- soil dislogeable residue studies
- foliar pesticide residue studies

The contractor shall also conduct studies in the microbiology area including but not limited to:

- antimicrobial product efficacy
- plant incorporated pesticides
- public health issues related to the microbiological sciences

Some of the studies may be high priority projects to reconcile manufacturer's claims with OPP's registration/reregistration requirements, special reviews, and negotiated settlement dates with the registrants.

11.2.1 Prepare Study Plan

The contractor shall prepare a Study Plan for each project, and that Plan shall provide study designs, including statistical approaches for number and location of samples required to be taken and analyzed, and the number and type of quality control samples that are required for the

project. Within the Study Plan, the Contractor will have included a quality assurance project plan (QAPP) which describes the overall goals and data quality objectives of the study, a description of the analytical method in detail, a description of the QA/QC requirements, the sampling plan, calculations, documentation, and report format. When specific information and needs are known, the contractor shall prepare a short report for the PO/APO or WAM addressing estimated resources, time, equipment/instruments required and other salient factors such as expected difficulties. The contractor shall work through technical issues and concerns with the requesting laboratory, keeping the PO/APO or WAM informed. The Contractor may be asked to produce the design and development phases of the plan with or without completing the implementation phase.

11.3 Efficacy Testing

The contractor shall provide testing support for activities in OPP Divisions, other EPA Offices including Regions, States and other U.S. and international governmental offices to monitor the performance of antimicrobial products against selected organisms.

11.4 Special Projects

The contractor shall provide assistance in the following areas including but not limited to method development work, on-site assistance, and general assistance.

DELIVERABLES:

1) Interim/draft reports as required within the timeframe as specified in the Work Assignment.
2) A final report for each individual project within the timeframe as specified in the Work Assignment.

ACCEPTANCE CRITERIA:

- A Quality Assurance Project Plan (QAPP) is required for this task, adhering to

OPP QAPP requirements, including compliance with FIFRA Good Laboratory Practices (GLPs). The QAPP must be approved by the EPA P.O., WAM, and OPP QAO. A QAPP addendum may be required for each different project. Some work can be expected to involve enforcement samples requiring strict chain-of-custody procedures. Internal audits of each completed individual project are required.

- The draft and final reports shall be submitted within the timeframe as specified in the Work Assignment. The final report will completely address all of the required objectives, issues, deliverables, and schedules as specified in the Work Assignment.

4. PERFORMANCE REQUIREMENTS SUMMARY TABLE

Performance Requirement	Performance Standard	Method of Surveillance	Acceptable Quality Limit	Incentive/ Disincentive
General Requirements				
Draft and final reports under all tasks.	Reports shall be submitted within the timeframe specified in the work assignment (WA).	EPA will document the date of receipt of each report.	85% of the draft and final reports submitted within the timeframe specified in the WA.	Increase/reduce fix fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Task 1: Analytical Methods Review				

Performance Requirement	Performance Standard	Method of Surveillance	Acceptable Quality Limit	Incentive/ Disincentive
Contractor shall review pesticide analytical methods.	Reviews shall follow the SOPs. Reports will completely address all objectives in WA.	EPA will evaluate each draft and final report	No more than 25% of the initial report requires revisions	Increase/reduce fix fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Task 2: Laboratory Method Validation				
Prepare for analyses and conduct preliminary testing of method.	Preparations completed and analyses started with 60 days of receiving WA. No deviations from written methods.	EPA will verify through phone conversations that analyses were started on schedule.	98% of the method validation analyses will start within 60 days. No deviations from written methods.	Increase/reduce fix fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Complete validation of method and submit report.	All SOPs, protocols, guidelines as specified in the WA are adhered to. Reports address all the areas as specified in the WA.	EPA will review all reports to determine if all protocols, etc were followed and to determine if the report is complete.	Initial Draft Reports require less than 25% revisions.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Task 3: Laboratory Method Indices				

Performance Requirement	Performance Standard	Method of Surveillance	Acceptable Quality Limit	Incentive/ Disincentive
Scan methods into e-files and update indices.	Methods scanned accurately and completely. Indices accurately and completely update twice a year.	EPA will periodically review the efiles and indices to determine.	95% of the methods scanned accurately and completely, within the timeframe specified in WA. 100% of the Indices are complete and accurate.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Send methods to customers	All requests for information shall be completely fulfilled within 2 days.	EPA will review the logs of all requests.	95% of the requests fulfilled within 2 days.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Task 4: Inter-Lab State QA Program Support				
Prepare Check Samples	Check samples prepared using established procedures and practices.	EPA will review all check sample reports.	95% of all check samples prepared completely and accurately within the timeframe in the WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).

Performance Requirement	Performance Standard	Method of Surveillance	Acceptable Quality Limit	Incentive/ Disincentive
Develop & Implement Plans for Check Sample Exercise Program	Program addresses methods, procedures, and objectives outlined in the WA	EPA will review and approve check sample exercise plans. EPA will review reports to States on results of implementation.	Plans should address 100% of the methods & procedures.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Task 5: Training Workshops for State Labs				
Develop Workshop Plans; Prepare training materials; Handle logistics.	Work shops shall be prepared & conducted in a timely manner and completely address required objectives, issues & deliverables specified in the WA.	EPA will review and approve workshop plans, training materials, and draft and final reports.	Work shops should address 100% of the required objectives, issues and deliverables.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Task 6: Test Parameter Guidelines				
Efficacy Test Methods	Test conditions shall be extracted from the most appropriate study submitted for registration of claims.	EPA will review parameters for the first 12 products for accuracy and completeness and spot check parameters thereafter.	100% of test parameters completed accurately and completely within the timeframe specified in WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).

Performance Requirement	Performance Standard	Method of Surveillance	Acceptable Quality Limit	Incentive/ Disincentive
Product Chemistry Test Methods	Test methods shall be extracted from the most appropriate study submitted	EPA will review each method for accuracy and completeness.	100% of the available methods copied and delivered within the timeframe specified in WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Test 7: Media, Reagents, Diluents, and Glass Prep for Antimicrobial Product Testing				
Prepare Media & Reagents	Media/reagents prepared completely and accurately as specified in WA.	EPA will review each Media/Reagent Preparation sheet.	95% of all media/reagents prepared completely and accurately within the timeframe in the WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Evaluate Media & Reagents	Media/reagents evaluated completely and accurately as specified in WA.	EPA will review each Performance & Sterility Assessment sheet.	95% of all evaluations performed completely and accurately within the timeframe in the WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Task 8: National Repository				

Performance Requirement	Performance Standard	Method of Surveillance	Acceptable Quality Limit	Incentive/ Disincentive
Log-In Requests	Requested standards logged - in accurately, completely, and in a timely manner on forms and in database.	EPA will review each request form for accuracy and completeness.	95% of all requests logged-in accurately and completely within the timeframe specified in the WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Prepare, Package & Ship Standards	Requested standards prepared, packaged, and shipped completely, accurately, and in a timely manner as specified in WA.	EPA will review each requested standard, before and after packaging,, for the first month and spot check thereafter.	100% of all requested standards filled completely and accurately within the timeframe specified in the WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Record Shipment	Shipped standards recorded accuarately, completely, and in a timely manner on forms and in database.	EPA will review each completed record of shipments for accuracy and completeness for the first month and spot check thereafter.	95% of all shipped standards recorded accurately and completely within the timeframe specified in the WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).

Performance Requirement	Performance Standard	Method of Surveillance	Acceptable Quality Limit	Incentive/ Disincentive
Maintain Inventory	Standards must be ordered in a timely manner, logged-in, scanned, and stored accurately and completely as specified in WA.	EPA will spot check standard receipts, documents, and storage area twice a month.	95% of inventory maintained in a timely fashion with associated labels, forms, & database maintained accurately and completely	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Task 9: On-Site QC Services to the Microbiology Laboratory				
Front End Processing	Control numbers and information on media/reagents, and supplies must be recorded accurately and completely within the timeframe specified in the WA.	EPA will check each entry during the first month and spot check thereafter.	95% of assigned control numbers and other information maintained accurately and completely within timeframe specified in WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Monitor Standard Equipment, etc.	Equipment, etc. must be monitored following established schedules and procedures as specified in the SOP.	EPA will review logs and check standard equipment as specified in the SOP.	All entries into logs must be 100% accurate and legible with correct notations for entry errors and entry omissions.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).

Performance Requirement	Performance Standard	Method of Surveillance	Acceptable Quality Limit	Incentive/ Disincentive
Maintain Operation of Equipment, etc.	Equipment, etc. must be maintained following established schedules and procedures as specified in the SOP.	EPA will review logs and check standard equipment as specified in the SOP.	All entries into logs must be 100% accurate and legible with correct notations for entry errors and entry omissions.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Track Prepared Media, Reagents, & Supplies	Prep numbers and information on media/reagents must be recorded accurately and completely within the timeframe specified in the SOP.	EPA will check prepared media, reagents, and supplies as specified in the SOP.	95% of assigned prep numbers and other information maintained accurately and completely within timeframe specified in SOP.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Task 10: Efficacy Test Support				
Develop Study Protocol	Study Protocols shall be submitted within the timeframe specified in the WA.	EPA will document the date of receipt of the study protocol.	85% of the study protocols submitted within the timeframe specified in the WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).

Performance Requirement	Performance Standard	Method of Surveillance	Acceptable Quality Limit	Incentive/ Disincentive
Testing Support	Conduct testing and report finding using established procedures as specified in the SOP.	EPA will review each report and document the date of receipt.	85% of the draft and final reports submitted within the timeframe specified in the WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Draft & Final Product Performance Reports	Reports shall be submitted within the timeframe specified in the WA and be accompanied by quality assurance documentation.	EPA will review each report, the quality assurance documentation, and document the date of receipt.	85% of the draft and final reports submitted within the timeframe specified in the WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Task 11: Special Analytical Projects Support for Intra- and Inter-Agency Pesticide Program				
Analytical Support Work	Study Plans and reports shall be submitted within the timeframe specified in the WA.	EPA will document the date of receipt of the study plans and reports.	85% of the draft and final study plans and reports submitted within the timeframe specified in the WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).

Performance Requirement	Performance Standard	Method of Surveillance	Acceptable Quality Limit	Incentive/ Disincentive
Monitoring & Enforcement Studies	Study Plans and reports shall be submitted within the timeframe specified in the WA.	EPA will document the date of receipt of the study plans and reports.	85% of the draft and final study plans and reports submitted within the timeframe specified in the WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Efficacy Testing	Study Plans and reports shall be submitted within the timeframe specified in the WA.	EPA will document the date of receipt of the study plan and reports.	85% of the draft and final study plans and reports submitted within the timeframe specified in the WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).
Special Projects	Study Plans and reports shall be submitted within the timeframe specified in the WA.	EPA will document the date of receipt of study plans and reports.	85% of the draft and final study plans and reports submitted within the timeframe specified in the WA.	Increase/reduce fixed fee by no more than 1 percentage point based on biannual evaluations (numerical ratings by Tasks).

ATTACHMENT A:

LISTING OF

STANDARD OPERATING PROCEDURES

FOR BEAD LABORATORIES

Standard Operating Procedures OPP Microbiology Laboratory	
SOP	**Title**
EQ-01-02	Calibration and Maintenance of pH Meters
EQ-02-02	Calibration of Thermometers
EQ-03-02	Calibration and Maintenance of Weigh Balances
EQ-04-02	Systems Check for the Beckman (DU Series 500) Spectrophotometer
EQ-05-02	Calibration and Maintenance of Timers
EQ-06-02	Calibration of Kimble Class A Burets
EQ-08-02	Verification of Volume Dispensed and Maintenance of Oxford Automatic Dispensor and Hamilton Microlab 500
MB-01-01	Biosafety in the Laboratory
MB-02-02	Test Microbes for the AOAC Use-Dilution Method, AOAC Germicidal Spray Product Test, Germicidal Towelette Product Test, AOAC Confirmatory Tuberculocidal Test, and the AOAC Sporicidal Activity Test Method: Culture Initiation, Culture Maintenance and Quality Control
MB-03-02	Screening Carriers Used in Disinfectant Efficacy Testing
MB-04-02	Determining Carrier Counts
MB-05-02	AOAC Use Dilution Method for Testing Disinfectants
MB-06-02	Testing of Spray Disinfectants Against Salmonella choleraesuis, Staphylococcus aureus, Pseudomonas aeruginosa, and Mycobacterium bovis (BCG)
MB-07-02	Confirmatory Tuberculocidal Method for Testing Disinfectant Efficacy
MB-09-02	Testing of Towelette Disinfectants Against Salmonella choleraesuis, Staphylococcus aureus, Pseudomonas aeruginosa, and Mycobacterium bovis (BCG)
MB-10-01	Media and Reagents Used in Efficacy Testing of Disinfectants
QC-01-02	Quality Assurance of Purified Water
QC-02-02	Air/Surface Monitoring of Microbiology Laboratories
QC-03-02	Glass Washing and Detergent Residues Test
QC-04-02	Cleaning and Disinfection of Recirculating Chillers
QC-05-02	Monitoring Temperature of Incubators, Refrigerators, and Freezers

Standard Operating Procedures OPP Microbiology Laboratory	
SOP	**Title**
QC-06-02	Use and Maintenance of Biological Safety Cabinets + HEPA Filters
QC-07-02	Monitoring Water Temperature of Recirculating Chillers
QC-08-02	Monitoring Temperature/Humidity of the Sample Storage Room
QC-09-02	Establishment of Control Numbers and Tracking Laboratory Supplies
QC-10-02	Media and Reagents: Examination and Expiration Time
QC-11-02	Performance Assessment and Sterility Verification of Prepared Media and Reagents
QC-12-02	Sterility Check of Pre-Sterilized and Autoclaved Laboratory Supplies
QC-13-02	Performance Verification of Autoclaves
QC-14-02	Monitoring Temperature of Water Baths for Holding (Tempering) Media
QC-15-02	Media and Reagent Preparation: Assigning Prep and Sterilization Run Numbers
QC-16-02	VITEK: Establishment of Culture Identification Numbers
QC-17-02	VITEK: Quality Control Procedures
QC-18-02	Sterility Assessment of Disinfectant Product Samples
QC-19-02	Calibration of Eppendorf Pipettes Using the PCS 2 Pipette Calibration System
QC-20-01	Autoplate 4000 Automated Spiral Plater
ADM-01-02	Preparation and Review of Disinfectant Performance Reports
ADM-02-01	Preparation and Review of Standard Operating Procedures (SOPs)
ADM-03-01	Records and Archives
ADM-04-01	OPP Microbiology Laboratory Training Program
COC-01-02	Disinfectant Sample Login and Tracking
QA-01-02	Operations of the Quality Assurance Unit
QA-02-02	Internal Quality Assurance Audits
QA-04-01	Master Schedule Preparation
QMP-01-01	Quality Assurance Management Plan for the Office of Pesticide Programs Microbiology Laboratory at the Environmental Science Center Fort Meade, Maryland

Standard Operating Procedures OPP Environmental Chemistry Laboratory	
SOP	**Title**
ECME-01	Standard Evaluation Procedure (SEP) for Reviewing Environmental Chemistry Methods (ECMs)
ECME-02	Standard Operating Procedure for Conducting Environmental Chemistry Method Lab Evaluations (ECMLVs)
ECME-03	Standard Operating Procedure for the Tracking & Archiving of Environmental Chemistry Methods (ECMs)