

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON D.C. 20460

OFFICE OF THE ADMINISTRATOR SCIENCE ADVISORY BOARD

January 21, 2010

EPA-SAB-10-002

The Honorable Lisa P. Jackson Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

Subject: SAB Recommendations for EPA's FY2009 Scientific and Technological Achievement Awards (STAA)

Dear Administrator Jackson:

The EPA Science Advisory Board (SAB) is pleased to transmit for your consideration the SAB's recommendations for FY 2009 Scientific and Technological Achievement Awards (STAA). Each year since the program was established in 1980, the SAB has been asked by EPA's Office of Research and Development (ORD) to review EPA's nominated scientific papers and make recommendations for awards. We are glad to continue our participation on this important program.

This year, the SAB STAA Committee reviewed a total of 111 nominations comprised of 167 total papers in twelve science and technology categories. The SAB hereby recommends fifty-six nominations for monetary awards and another twenty-five deserving of honorable mention. Of the nominations recommended for monetary awards, three (3) were recommended for the highest award-- Level I, twenty-two (22) for Level II, and thirty-one (31) for Level III awards.

To facilitate the SAB review of future STAA nominations, the SAB recommends that the Agency evaluate the current administrative procedure for the STAA program to (a) strengthen the justification of the nominated papers as to their scientific contributions and relevance to EPA's mission; and (b) discourage the practice of submission of multiple nominations of papers involving the same EPA author(s) on similar topical areas.

The SAB applauds the Agency's public recognition of the scientific work of EPA scientists and engineers through publication in the peer-reviewed literature. This promotes the sound science and high quality research that bolsters EPA's mission. Thank you for providing the SAB with the opportunity to assist the Agency with this important program. The SAB looks forward to reviewing the FY 2010 nominations.

Sincerely,

/Signed/

Dr. Deborah L. Swackhamer, Chair EPA Science Advisory Board /Signed/

Dr. Taylor Eighmy, Chair SAB Scientific and Technological Achievement Awards Committee

NOTICE

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Mr. Thomas Miller, Designated Federal Officer, 1200 Pennsylvania Avenue, NW 1400F, Washington, DC, Phone: 202-343-9982, Fax: 202-233-0643, (miller.tom@epa.gov)

1. REVIEW PROCEDURE

EPA's Scientific and Technological Achievement Awards (STAA) was established in 1980 to recognize Agency's scientists and engineers who published their technical work in peer-reviewed literature. The STAA program is administered and managed by EPA's Office and Research Development (ORD). Each year, the EPA Science Advisory Board (SAB) has been asked to review EPA's nominated scientific papers and make recommendations for awards. In response to ORD's request, the SAB formed a new SAB STAA Committee to review and evaluate scientific and technological papers published in peer-reviewed journals by EPA authors and nominated for the FY2009 STAA program. The Committee was formed in accordance with the SAB process as described in the SAB 2002 publication, *Panel Formation process: Immediate Steps to Improve Policies and Procedures* (EPA-SAB-EC-COM-02-003).

In 2009, ORD provided 111 nominations for STAA awards. ORD grouped the nominations into twelve science and technology categories and screened them for conformance with EPA's *STAA Nomination Procedures and Guidelines*, which describes the award levels, eligibility criteria, and the criteria the SAB should use to evaluate the nominations for awards. The topical categories for nominations were: Control Systems & Technology (CS), Ecological Research (ER), Energy and the Environment (EE), Health Effects Research and Human Health Risk Assessment (HE), Homeland Security (HS), Industry and the Environment (IE), Integrated Risk Assessment (IR), Monitoring & Measurement Methods (MM), Review Articles (RA), Risk Management and Ecosystem Restoration (RM), Transport and Fate (TF), and Other Environmental Research (OR). The number of 2009 STAA nominations sorted by topic category were as follows:

Topic	Number of Nominations
Control Systems and Technology	2
Ecological Research	22
Energy and the Environment	2
Health Effects Research and Human Health Risk Assessment	16
Homeland Security	1
Industry and the Environment	3
Integrated Risk Assessment	3
Monitoring and Measurement Methods	19
Other Environmental Research	6
Review Articles	11
Risk Management and Ecosystem Restoration	7
Transport and Fate	19

The awards criteria are defined by the Agency as follow:

Level I awards - are for nominees who have accomplished an exceptionally high-quality research or technological effort. The nomination should recognize the creation or general revision of a scientific or technological principle or procedure, or a highly significant improvement in the value of a device, activity, program, or service to the public. It must be at least of national significance or have high impact on a broad area of science/technology. The nomination must be of far

- reaching consequences and recognizable as a major scientific/technological achievement within its discipline or field of study.
- 2) <u>Level II awards</u> are for nominees who have accomplished a notably excellent research or technological effort that has qualities and values similar to, but to a lesser degree, than those described under Level I. It must have timely consequences and contribute as an important scientific/technological achievement within its discipline or field of study.
- 3) <u>Level III awards</u> are for nominees who have accomplished an unusually notable research or technological effort. The nomination can be for a substantial revision or modification of a scientific/technological principle or procedure, or an important improvement to the value of a device, activity, program, or service to the public. It must relate to a mission or organizational component of the EPA, or significantly affect a relevant area of science/technology.
- 4) <u>Honorable Mention</u> The Agency has also added a fourth non-cash level award for nominations which are noteworthy but which do not warrant a Level I, II or III award. Honorable Mention applies to nominations that: (1) may not quite reach the level described for a Level III award; (2) show a promising area of research that the Committee wants to encourage; or (3) show an area of research that the Committees feels is too preliminary to warrant an award recommendation at this time.

Committee members reviewed a set of nominations suited to his or her expertise, and filled out an evaluation form for each nomination. Each nomination was reviewed by at least two Committee members. Prior to the meeting, Committee members provided their individual initial ratings of the nominations. At a closed meeting on August 17-19, 2009 in Washington, DC, the Committee discussed each of the 111 nominations and reached consensus on the score achieved by each individual nomination. In some cases, additional reviewers reviewed the nominations to provide further insights in their evaluation. Due to topic similarities the Committee combined four nominations into two, and thus 109 total nominations were considered for STAA awards. For several cases where conflicts or potential conflicts of interest existed, Committee members recused themselves from the review and discussion process. The Committee considered the relative distribution of Level I, II, III, Honorable Mention, and not recommended for award assignments, and developed a consensus list of award recommendations. The Committee also discussed recommendations for improving the 2010 STAA nomination process. It should be noted that the SAB meeting was closed to the public to protect the personal privacy of the authors.

The Committee's draft report (without Appendix A which identifies the award recommendations) was submitted for the quality review and approval by the Chartered SAB via e-mail correspondence in November 2009.

2. AWARD RECOMMENDATIONS

The Committee recommended fifty-six nominations for 2009 STAA monetary awards and another twenty-five for honorable mention. Of the works recommended for monetary awards, three were recommended for Level I, twenty-two for Level II, and thirty-one for Level III. All nominations receiving a recommendation for a Level I, II or III award or an Honorable Mention are listed in Appendix A. The final ranking agreed to at the August 17-19, 2009 meeting was a consensus ranking of the Committee. The Table below summarizes the awards by year since 1999, including the recommendations for 2009.

TABLE Comparison of Award Recommendations over Time

Comparison of Awara Recommendations over Time											
Award Level	FY										
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Nominations	89	102	126	140	136	146	110	90	140	130	109
Reviewed											
Level I	1	0	2	4	7	6	3	5	5	5	3
Level II	7	5	11	7	18	13	6	11	13	16	22
Level III	24	36	29	26	29	32	30	29	37	30	31
Honorable	10	20	21	39	33	37	31	26	45	43	25
Mention											
Not	47	41	63	64	49	58	40	19	40	36	28
Recommended											

3. ADMINISTRATIVE RECOMMENDATIONS

During the August 17-19, 2009 meeting, the Committee identified three aspects of the nomination process that might be improved in future years: a) as with the previous years, the need to assign a significant number of nominations to the "not recommended" category; b) the proper grouping of similar papers within a nomination and identification of topic categories for nominations; and c) the tracking of similar nominations over multiple years. The Committee then developed recommendations to address these areas for potential improvement. These observations are offered with the hope that the nomination process can continue to ensure STAA's fidelity towards recognizing outstanding science.

The Committee observed that the single largest factor resulting in a "not recommended" categorization is the justification component that describes the value and the utility of the research and its relevance to EPA's mission. The Committee noted that justifications frequently do not accurately describe the breadth and importance of submitted papers, nor do they clearly state the value of the work to the Agency's mission. Another identified factor was that certain nominations were very narrowly focused and did not clearly identify their relevance to EPA's mission even though they represented excellent science and were published in very high quality journals.

As noted in last year's report to the Administrator, the Committee observed that it is increasingly common to receive a number of nominations of papers that have similar justifications, address themes and/or methods that are essentially the same, have the same or similar groups of authors, and support closely related conclusions. The current nomination form restricts each nomination to a maximum of three papers per nomination, and requires that the nomination be categorized within a specific topic. The Committee observed that some prolific researchers had several nominations containing three papers each, and all papers within these nominations were topically similar. However, these nominations were inappropriately categorized into different topic areas. It was often difficult for the Committee to discern significant differences in intellectual and scientific contributions between these nominations, and confusing for the Committee to find such papers spread among many categories. It was also difficult for the Committee members to identify similar papers that were nominated in previous years, since an index of previous nominations and awards was not immediately available to the Committee during the meeting.

The Committee also observed that last year's SAB recommendations included a suggestion to limit the amount of supplemental materials to 100 pages or less. The Committee noted this recommendation was satisfactorily implemented within the 2009 STAA nominations and appreciated EPA's efforts to address this suggestion.

In light of the above-noted observations, the Committee makes the following administrative recommendations to improve the nomination process:

- 1) Strengthen the justification of the nominated papers as to their scientific contributions and relevance to EPA's mission:
 - Nominating and Approving officials should ensure that justification statements within the Nomination Form match the quality and impacts of submitted papers; and are precise, clear, unique, and emphatic in the impacts that the nominated work has on the Agency's mission. Nominating and Approving officials should also ensure that topic categories for nominations are appropriately identified.
- 2) Discourage the practice of submission of multiple nominations of papers involving the same EPA author(s) on similar topical areas:
 - When more than one paper is nominated in a given year or within the previous five years involving the same EPA author(s) on a related subject, a clear statement must be provided in the justification statement of the Nomination Form that identifies these related papers, and explains how the contribution of each paper differs.
 - The limitation to three papers per nomination should be dropped, and language should be inserted into the Nomination Form that encourages nomination of an appropriate number of papers that are thematically relevant. However, the authors should be encouraged to select their strongest contributions since the overall score of an otherwise outstanding paper can be negatively impacted by being coupled to a weaker submission.
 - The Agency should develop an index of STAA papers that have been nominated during the previous five years. The index should be updated annually and provided to the SAB Staff Office when the Agency sends nominated papers to the SAB Staff Office. The Committee understands that this task is non-trivial, notes that this recommendation was made last year with a two-year implementation time line, and encourages progress towards this goal.

Appendix A - Nominations Recommended for Awards

Nominations Recommended for a	
Titles and Citations of Submitted Papers	Authors* and Nominating Organization
Monograph titled Integrated Disinfection Byproducts Mixtures Research (the 4Lab Study): Toxicological and Chemical Evaluation of Alternative Disinfection Treatment Scenarios	Dr. Simmons, Jane Ellen (13%) Dr. Richardson, Susan D. (10%) Mr. Miltner, Richard J. (9%) Dr. Speth, Thomas (8%) Ms. Schenck, Kathleen (6%) Dr. Narotsky, Michael G. (5%) Ms. Teuschler, Linda K. (4%) Mr. Rice, Glenn (4%) Ms. Warren, Sarah H. (4%) Dr. Hunter, E. Sidney (3%) Dr. Claxton, Larry D. (3%) Dr. DeAngelo, Anthony B. (3%) Ms. Best, Deborah S. (3%) Dr. Pegram, Rex A. (2%) Dr. Ward, William (2%) Ms. Rogers, Ellen H. (2%) Mr. McDonald, Anthony (2%) Mr. Thruston, A. D. (1%) Ms. Moore, Tanya M. (1%) Mr. Sey, Yusupha M. (1%) Mr. Krasner, Stuart (4% Non-EPA) Dr. Weinberg, Howard (4% Non-EPA) Dr. Crosby, Lynn M. (3% Non-EPA) Dr. McKague, A. B. (1% Non-EPA) Dr. Gennings, Chris (1% Non-EPA) Dr. Morgan, Kevin T. (1% Non-EPA)
 (1) Gene Expression Profiles in the Cerebellum and Hippocampus Following Exposure to a Neurotoxicant, Aroclor 1254: Developmental Effects (2) Gene Expression Profiles Following Exposure to a Developmental Neurotoxicant, Aroclor 1254: Pathway analysis for possible mode(s) of action 	Dr. Royland, Joyce E. (50%) Dr. Kodavanti, Prasada Rao S. (40%) Ms. Wu, Jinfang (5% Non-EPA) Dr. Zawia, Nassar H. (5% Non-EPA) NHEERL
Review of the Governing Equations, Computational Algorithms, and Other Components of the Models-3 Community Multiscale Air Quality (CMAQ) Modeling System	Mr. Schere, Kenneth L. (50%) Dr. Byun, Daewon (50% Non-EPA) NERL
	Monograph titled Integrated Disinfection Byproducts Mixtures Research (the 4Lab Study): Toxicological and Chemical Evaluation of Alternative Disinfection Treatment Scenarios (1) Gene Expression Profiles in the Cerebellum and Hippocampus Following Exposure to a Neurotoxicant, Aroclor 1254: Developmental Effects (2) Gene Expression Profiles Following Exposure to a Developmental Neurotoxicant, Aroclor 1254: Pathway analysis for possible mode(s) of action Review of the Governing Equations, Computational Algorithms, and Other Components of the Models-3 Community Multiscale Air Quality (CMAQ)

	Nominations Recommended for a l	i
Nom.	Titles and Citations of Submitted Papers	Authors* and Nominating Organization
S09ER	Genomic Approaches for Cross-Species	Dr. Benson, William H. (60%)
0004	Extrapolation in Toxicology	Dr. Di Giulio, Richard T. (40% Non-EPA)
		NHEERL
S09ER	(1) Linkage of Biochemical Responses to	Dr. Ankley, Gerald T. (30%)
0008	Population-Level Effects: A Case Study with	Dr. Miller, David H. (30%)
	Vitellogenin in the Fathead Minnow (Pimephales	Ms. Jensen, Kathleen M. (10%)
	promelas)	Dr. Villeneuve, Daniel L. (10%)
		Ms. Durhan, Elizabeth J. (5%)
	(2) Relationship of Plasma Sex Steroid	Mr. Kahl, Michael D. (5%)
	Concentrations in Female Fathead Minnows to	Ms. Makynen, Elizabeth A. (5%)
	Reproductive Success and Population Status	Dr. Martinovic, Dalma (5% Non-EPA)
		NHEERL
S09ER	Stable Nitrogen Isotopes of Plankton and Benthos	Mr. Peterson, Gregory S. (65%)
0009	Reflect a Landscape-Level Influence on Great Lakes	Dr. Sierszen, Michael E. (15%)
	Coastal Ecosystems	Dr. Yurista, Peder M. (15%)
		Dr. Kelly, John R. (5%)
		NHEERL
S09ER	Comparing Environmental Influences on Coral	Dr. Yee, Susan Harrell (80%)
0019	Bleaching Across and within Species Using	Dr. Santavy, Deborah L. (10%)
	Clustered Binomial Regression	Dr. Barron, Mace G. (10%)
		NHEERL
S09ER	(1) Evaluation of Stony Coral Indicators for Coral	Dr. Fisher, William S. (42%)
)115	Reef Management	Mr. Courtney, Lee (17%)
		Ms. Oliver, Leah (7%)
	(2) Estimating 3-Dimensional Colony Surface Area	Mr. Quarles, Robert (3%)
	of Field Corals	Mr. Campbell, Jed (3%)
		Dr. Raimondo, Sandy (3%)
	(3) Characterizing Coral Condition Using Estimates	Dr. Davis, Will (3%)
	of Three-Dimensional Colony Surface Area	Ms. Harris, Peggy (2%)
		Ms. Hemmer, Becky (2%)
		Mr. Patrick, Jim (2%)
		Mr. LoBue, Charles (2%)
		Mr. Davis, Wayne (2%)
		Mr. Parsons, Mel (2%)
		Ms. Force, Leska (8% Non-EPA)
		Mr. Hutchins, Aaron (2% Non-EPA)
		NHEERL

*Note: The percentages given after each name represent the current percent of the total level of effort as documented in the EPA nomination

Nom.	Nominations Recommended for a I Titles and Citations of Submitted Papers	Authors* and Nominating Organization
1,0111	-	
S09HE 0024	 (1) Evaluation of Physiologically Based Pharmacokinetic Models for Use in Risk Assessment (2) Approaches for Applications of Physiologically Based Pharmacokinetic Models in Risk Assessment 	Dr. DeWoskin, Robert S. (8%) Dr. Lipscomb, John C. (8%) Dr. Thompson, Chad M. (8%) Dr. Schlosser, Paul (8%) Dr. Sonawane, Babasaheb (8%) Dr. Krishnan, Kannan (44% Non-EPA)
		NCEA
S09HE 0032	 (1) Differences in Allergenic Potential of Food Extracts Following Oral Exposure in Mice Reflect Differences in Digestibility: Potential Approaches to Safety Assessment (2) Failure to Induce Oral Tolerance in Mice is 	Dr. Bowman, Christal C. (50%) Dr. Selgrade, MaryJane K. (50%)
	Predictive of Dietary Allergenic Potency Among Foods with Sensitizing Capacity	NHEERL
S09HE 0033	Toxicogenomic Study of Triazole Fungicides and Perfluoroalkyl Acids in Rat Livers Predicts Toxicity and Categorizes Chemicals Based on Mechanisms of Toxicity	Mr. Dix, David J. (15%) Mr. Martin, Matthew T. (15%) Mr. Lau, Christopher (10%) Ms. Wood, Carmen R. (10%) Ren, Hongzu (10%) Mr. Corton, J. C. (5%) Mr. Kavlock, Robert J. (5%) Mr. Brennan, Richard J. (13% Non-EPA) Mr. Hu, Wenyue (12% Non-EPA) Ayanoglu, Eser (5% Non-EPA)
		NCCT
S09IE0 042	 Methanol Oxidation Using Ozone on Titania- Supported Vanadia Catalyst Vapor Phase Oxidation of Dimethyl Sulfide with Ozone over V2O5/TiO2 Catalyst 	Dr. Sahle-Demessie, Endalkachew (54%) Dr. Devulapelli, Venu Gopal (23% Non-EPA) Dr. Almquist, Catherine B. (13% Non-EPA) Dr. Sehker, Sridara Chandra (7% Non-EPA) Ms. Sowash, Julia (3% Non-EPA)
	(3) Catalytic Oxidation of Dimethyl Sulfide with Ozone: Effects of Promoter and Physico-Chemical Properties of Metal Oxide Catalysts	NRMRL

Nom.	Titles and Citations of Submitted Papers	Authors* and Nominating Organizatio
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S09M		Dr. Lindstrom, Andrew B. (25%)
M0049	Ohio and North Carolina, USA	Dr. Strynar, Mark J. (25%)
		Dr. Egeghy, Peter (5%)
	(2) Perfluorinated Compounds in the Cape Fear	Dr. Lazorchak, James (5%)
	Drainage Basin in North Carolina	Dr. Ye, Xibiao (15% Non-EPA)
		Dr. Nakayama, Shoji (15% Non-EPA)
		Dr. Varns, Jerry L. (5% Non-EPA)
	Homogenates from the Ohio, Missouri, and Upper Mississippi Rivers, USA	Mr. Helfant, Laurence (5% Non-EPA)
		NERL
S09M	Using Field Data and Weight of Evidence to	Dr. Cormier, Susan M. (25%)
M0065	Develop Water Quality Criteria	Dr. Paul, John F. (25%)
	,	Dr. Spehar, Robert L. (25%)
		Dr. Berry, Walter J. (10%)
		Dr. Suter, Il, Glenn W. (10%)
		Dr. Shaw-Allen, Patricia (5%)
		·
		NCEA
S09OR	(1) Hydrologic Modeling of an Eastern Pennsylvania	Dr. Hantush, Mohamed M. (50%)
0070	Watershed with NEXRAD and Rain Gauge Data	Dr. Kalin, Latif (50% Non-EPA)
	(2) Stochastic Residual-Error Analysis for Estimating Hydrologic Model Predictive Uncertainty	
		NRMRL
S09OR	Spatial and Temporal Variability of Solar Ultraviolet	
0072		Dr. Fisher, William S. (10%)
	Importance of Colored Dissolved Organic Matter	Dr. Cyterski, Michael J. (10%)
		Dr. Shank, G. Christopher (15% Non-EPA)
		Dr. Stabenau, Erik (10% Non-EPA)
		Mr. Bartels, Erich (10% Non-EPA)
		Dr. Patterson, Karen W. (5% Non-EPA)
		Dr. Anderson, Susan L. (5% Non-EPA)
		NERL
S09RA	Dietary Uptake Models Used for Modeling the	Dr. Barber, M. Craig (100%)
0075	Bioaccumulation of Organic Contaminants in Fish	
		NERL

Nom.	Titles and Citations of Submitted Papers	Authors* and Nominating Organization
S09RA	(1) Bioavailability of Chemical Contaminants in	Dr. Erickson, Russell (10%)
0082	Aquatic Systems	Dr. Ankley, Gerald (10%) Dr. Barron, Mace (10%)
	(2) Toxicokinetics in Fishes	Dr. Cook, Philip (10%)
	(3) Ecological Risk Assessment	Dr. Henry, Tala (10%) Dr. McKim, James (10%)
		Dr. Mount, David (10%) Dr. Nichols, John (10%)
		Mr. Hayton, William (10% Non-EPA)
		Mr. Kleinow, Kevin (10% Non-EPA)
		NHEERL
	Non-Navigable Streams and Adjacent Wetlands:	Dr. Leibowitz, Scott G. (50%)
0083	Addressing Science Needs Following the Supreme Court's Rapanos Decision	Dr. Wigington, Jr, Parker J. (25%) Ms. Downing, Donna M. (10%)
	Court's Rapanos Decision	Dr. Rains, Mark C. (15% Non-EPA)
		NHEERL
S09TF0	(1) Effects of Using the CB05 vs. SAPRC99 vs. CB4	Ms. Luecken, Deborah (32%)
094	Chemical Mechanism on Model Predictions: Ozone	Dr. Sarwar, Golam (32%)
	and Gas-Phase Photochemical Precursor	Dr. Phillips, Sharon (9%)
	Concentrations	Dr. Jang, Carey (5%)
	(2) Impact of an Updated Carbon Bond Mechanism	Dr. Yarwood, Greg (12% Non-EPA) Dr. Whitten, Gary (5% Non-EPA)
	on Predictions from the Community Multiscale Air	Dr. Carter, William P.L. (5% Non-EPA)
	Quality Modeling System: Preliminary Assessment	,
		NERL
	(1) Seasonal and Regional Air Quality and	Dr. Sickles, II, Joseph E. (75%)
)99	Atmospheric Deposition in the Eastern US	Mr. Shadwick, Douglas S. (25% Non-EPA)
	(2) Changes in Air Quality and Atmospheric Deposition in the Eastern US: 1990-2004	
		NERL
S09TF0	Organic Carbon-Water Concentration Quotients (II	Dr. Burkhard, Lawrence P. (38%)
101	socS and pocS): Measuring Apparent Chemical	Dr. Cook, Philip M. (37%)
	Disequilibria and Exploring the Impact of Black Carbon in Lake Michigan	Ms. Lukasewycz, Marta T. (25%)
		NHEERL
	Evaluation of Groundwater Flow Patterns Around a	Dr. Simon, Michelle A. (50%)
103	Dual-Screened Groundwater Circulation Well	Dr. Johnson, Richard L. (50% Non-EPA)
		NRMRL

	Nominations Recommended for a Level II Award Total of 22				
Nom.	Titles and Citations of Submitted Papers	Authors* and Nominating Organization			
S09TF0 108	Designing Small Molecules for Biodegradability	Dr. Boethling, Robert S. (90%) Mr. DiFiore, David (5%) Ms. Sommer, Elizabeth (5%)  OPPTS			
	Air-Liquid Partition Coefficient for a Diverse Set of Organic Compounds: Henry's Law Constant in Water and Hexadecane	Dr. Hilal, Said (80%) Dr. Carreira, L. A. (15% Non-EPA) Dr. Ayyampalayam, S. N. (5% Non-EPA)  NERL			

^{*}Note: The percentages given after each name represent the current percent of the total level of effort as documented in the EPA nomination

	Nominations Recommended for a I	Level III Award Total of 31
Nom.	Titles and Citations of Submitted Papers	Authors* and Nominating Organization
S09CS0 001	Evaluation of Contaminant Resuspension Potential during Cap Placement at Two Dissimilar Sites	Mr. Lyons, Terrence M. (50%) Mr. Marcy, Ken (1%) Ms. Guza, Olga (1%) Dr. Magar, Victor (20% Non-EPA) Ms. Ickes, Jennifer A. (20% Non-EPA) Dr. Myers, Tommy E. (3% Non-EPA) Ms. Cumming, Lydia (1% Non-EPA) Dr. Keegan, Michael (1% Non-EPA) Mr. Albro, Carl S. (1% Non-EPA) Ms. Bachman, Brenda (1% Non-EPA) Mr. Fredette, Thomas J. (1% Non-EPA)
S09ER	(1) Ketoconazole in the Fathead Minnow	Dr. Villeneuve, Daniel L. (17%)
809ER 0006	<ul> <li>(1) Ketoconazole in the Fathead Minnow</li> <li>(Pimephales promelas): Reproductive Toxicity and Biological Compensation</li> <li>(2) Reproductive Toxicity of Vinclozolin in the Fathead Minnow: Confirming an Anti-Androgenic Mode of Action</li> <li>(3) Transcription of Key Genes Regulating Gonadal Steroidogenesis in Control and Ketoconazole-or Vinclozolin-Exposed Fathead Minnows</li> </ul>	Dr. Ankley, Gerald T. (17%) Ms. Jensen, Kathleen M. (6%) Mr. Kahl, Michael D. (6%) Ms. Makynen, Elizabeth A. (6%) Ms. Durhan, Elizabeth J. (3%) Dr. Johnson, Rodney D. (3%) Dr. Knoebl, Iris (3%) Dr. Martinovic, Dalma (15% Non-EPA) Ms. Blake, Lindsey S. (9% Non-EPA) Ms. Greene, Katie J. (9% Non-EPA) Mr. Brodin, Jeffrey D. (3% Non-EPA) Dr. Miracle, Ann L. (3% Non-EPA)
		NHEERL
S09ER 0012	<ul> <li>(1) Setting Expectations for the Ecological Condition of Streams: The Concept of Reference Condition</li> <li>(2) Striving for Consistency in a National Assessment: the Challenges of Applying a Reference-Condition Approach at a Continental Scale</li> </ul>	Dr. Stoddard, John (35%) Dr. Larsen, David P. (5%) Dr. Paulsen, Steven G. (5%) Dr. Sickle, John Van (5%) Dr. Yuan, Lester L. (5%) Dr. Herlihy, Alan T. (25% Non-EPA) Dr. Hawkins, Charles P. (10% Non-EPA) Dr. Johnson, Richard K. (5% Non-EPA)
		Dr. Norris, Richard H. (5% Non-EPA)  NHEERL

*Note: The percentages given after each name represent the current percent of the total level of effort as documented in the EPA nomination

Nom.	Titles and Citations of Submitted Papers	Authors* and Nominating Organization
S09ER 0015	Marine Sediment Toxicity Identification Evaluation Methods for the Anionic Metals Arsenic and Chromium	Dr. Burgess, Robert (35%) Dr. Cantwell, Mark G. (10%) Dr. Ho, Kay T. (10%) Ms. Pelletier, Marguerite C. (10%) Mr. Serbst, Jonathan R. (10%) Mr. Ryba, Stephan A. (10%) Ms. Perron, Monique M. (15% Non-EPA)
		NHEERL
S09ER 0018	<ol> <li>(1) Assessing the attributable risks, relative risks, and regional extents of aquatic stressors</li> <li>(2) Using Relative Risk to Compare the Effects of Aquatic Stressors at a Regional Scale</li> </ol>	Dr. Sickle, John Van (60%) Dr. Paulsen, Steven G. (20%) Dr. Stoddard, John L. (10%) Dr. Olsen, Anthony R. (10%)
		NHEERL
S09ER 0021	An Approach for Evaluating the Effectiveness of Various Ozone Air Quality Standards for Protecting Trees	Dr. Hogsett, William E. (40%) Dr. Tingey, David T. (25%) Dr. Lee, E. Henry (25%) Dr. Beedlow, Peter A. (5%) Dr. Andersen, Christian P. (5% Non-EPA)
		NHEERL
S09HE 0023	<ol> <li>(1) Perfluorooctanoic Acid-induced Developmental Toxicity in the Mouse is Dependent on Expression of Peroxisome Proliferator-Activated Receptor- Alpha</li> <li>(2) Developmental Toxicity of Perfluorooctane Sulfonate (PFOS) is not Dependent on Expression of Peroxisome Proliferator Activated Receptor-Alpha</li> </ol>	Dr. Strynar, Mark J. (5%)
	<ul><li>(PPARalpha) in the Mouse</li><li>(3) Gene Profiling in the Livers of Wild-Type and</li><li>PPARalpha-Null Mice Exposed to Perfluorooctanoic</li></ul>	Dr. Lindstrom, Andrew B. (5%) Ms. Wood, Carmen R. (5%) Ms. Schmid, Judith E. (1%) Dr. Nakayama, Shoji (1% Non-EPA)
	Acid	Mr. Zehr, Robert D. (1% Non-EPA) Mr. Helfant, Laurence (1% Non-EPA) Mr. Blair, Eric (1% Non-EPA)
		NHEERL
S09HE 0026	Lingering Effect: Epidemiological Information Useful for Risk Assessment	Dr. Chen, Chao W. (100%) NCEA

Nom.	Titles and Citations of Submitted Papers	Authors* and Nominating Organization
S09HE 0030	Mechanistic Investigation of the Noncytochrome P450-Mediated Metabolism of Triadimefon to Triadimenol in Hepatic Microsomes	Dr. Kenneke, John F. (43%) Mr. Mazur, Christopher S. (42%) Ms. Ritger, Susan E. (10% Non-EPA) Mr. Sack, Thomas J. (5% Non-EPA)
		NERL
S09HE 0035	(1) Uncertainties in Biologically-Based Modeling of Formaldehyde-Induced Respiratory Cancer Risk: Identification of Key Issues  (2) Uncertainties in the CIIT model for Formaldehyde-Induced Carcinogenicity in the Rat: A Limited Sensitivity Analysis-I  (3) Sensitivity Analysis of Biologically Motivated Model for Formaldehyde-Induced Respiratory Cancer in Humans	Dr. Subramaniam, Ravi P. (25%) Mr. White, Paul (11%) Dr. Chen, Chao (8%) Dr. Fox, John (7%) Dr. Schlosser, Paul M. (5%) Dr. Thompson, Chad M. (3%) Dr. Devoney, Danielle (2%) Dr. Crump, Kenny S. (24% Non-EPA) Ms. Landingham, Cynthia Van (12% Non-EPA) Dr. Portier, Christopher J. (3% Non-EPA)
		NCEA
S09HE 0039	Assays for EDC Screening  (2) High Throughput Adjustable 96-Well Plate	Dr. Harig, Phillip C. (30%) Ms. Cardon, Mary C. (25%) Dr. Wilson, Vickie S. (15%) Ms. Lambright, Christy (10%) Ms. Bobseine, Kathy (10%) Dr. Gray, Jr., L. Earl (5%)
	Assay for Androgen Receptor Binding: A Practical Approach for EDC Screening Using the Chimpanzee AR	Dr. Blystone, Chad (5% Non-EPA)  NHEERL
S09HS 0041	An Integrated Culture and Real-Time PCR Method to Assess Viability of Disinfectant Treated Bacillus Spores Using Robotics and the MPN Quantification Method	Ms. Varughese, Eunice A. (75%) Dr. Haugland, Richard A. (20%) Mr. Wymer, Larry J. (5%)
		NERL
S09IE0 044	Arsenate Adsorption on Ruthenium Oxide: A Spectroscopic and Kinetic Investigation	Dr. Luxton, Todd P. (50%) Dr. Scheckel, Kirk G. (25%) Dr. Eick, Matthew J. (25% Non-EPA)
		NRMRL
S09IR0 046	The relationship of maternal and fetal toxicity in developmental toxicology bioassays with notes on the biological significance of the "no observed adverse effect level"	Dr. Chernoff, Neil (60%) Ms. Rogers, Ellen H. (30%) Dr. Gage, Michael I. (5% Non-EPA) Dr. Francis, Bettina M. (5% Non-EPA)
		NHEERL

Nom.	Titles and Citations of Submitted Papers	Authors* and Nominating Organization
COOLDO	(1) I 1 (1° (1 1 M) C C	D H G (4004)
S09IR0	(1) Identification by Microarray of a Common	Dr. Hayes, Sam (40%)
047	Pattern of Gene Expression in Intact Intestine and	Dr. Vesper, Stephen (15%)
	Cultured Intestinal Cells Exposed to Virulent	Dr. Lye, Dennis (10%)
	Aeromonas hydrophila Isolates	Dr. Rodgers, Mark (5%)
	(2) Eltime Vimilance of Waterbarns and Clinical	Dr. Stelma, Gerard (5%)
	(2) Evaluating Virulence of Waterborne and Clinical Aeromonas Isolates Using Gene Expression and	Ms. Lye, Bethany (10% Non-EPA) Mr. McKinstry, Craig (5% Non-EPA)
	Mortality in Neonatal Mice Followed by Assessing	Dr. Mallard, Joel (5% Non-EPA)
	Cell Culture's Ability to Predict Virulence Based on	Dr. Vandewalle, Alain (5% Non-EPA)
	Transcriptional Response	Dr. Vandewane, Main (570 Non El M)
	Transcriptional response	NERL
S09M	Investigating Compensation and Recovery of	Dr. Ekman, Drew R. (22%)
M0053	Fathead Minnow (Pimephales promelas) Exposed to	Dr. Collette, Timothy W. (19%)
	17a- Ethynylestradiol with Metabolite Profiling	Dr. Teng, Quincy (14%)
		Dr. Villeneuve, Daniel L. (12%)
		Dr. Ankley, Gerald T. (12%)
		Dr. Jensen, Kathleen M. (7%)
		Dr. Kahl, Michael D. (7%)
		Dr. Durhan, Elizabeth (7%)
		NERL
S09M	Multi-Laboratory Testing of a Screening Method for	Dr. Rosati, Jacky Ann (50%)
M0054	World Trade Center (WTC) Collapse Duet	Ms. Bern, Amy M. (30%)
		Dr. Willis, Robert D. (10%)
		Ms. Conner, Teri L. (4%)
		Dr. Kahn, Henry (4%)
		Mr. Friedman, David (1%)
		Mr. Blanchard, Fredrick T. (1% Non-EPA)
		NHSRC
S09M	Development of EPA Method 535 for the	Dr. Shoemaker, Jody A. (75%)
M0057	Determination of Chloroacetanilide and Other	Ms. Vazquez (Bassett), Margarita (25%)
	Acetamide Herbicide Degradates in Drinking Water	
	by Solid-Phase Extraction and Liquid	
	Chromatography/Tandem Mass Spectrometry	NERL
S09M	The Effects of Meteorology on Ozone in Urban	Ms. Camalier, Louise (50%)
M0060	Areas and their Use in Assessing Ozone Trends	Mr. Cox, William (30%)
		Mr. Dolwick, Patrick (20%)
		OAQPS
S09M	Retained Nitrate, Hydrated Sulfates, and	Mr. Frank, Neil H. (100%)
M0062	Carbonaceous Mass in Federal Reference Method	
	Fine Particulate Matter for Six Eastern U.S. Cities	OAQPS
	he percentages given after each name represent the c	

	Nominations Recommended for a L	evel III Award Total of 31
Nom.	Titles and Citations of Submitted Papers	Authors* and Nominating Organization
S09M M0064	Signals from the Benthos: Development and Evaluation of a Benthic Index for the Nearshore Gulf of Maine	Mr. Hale, Stephen S. (90%) Dr. Heltshe, James F. (10% Non-EPA)  NHEERL
S09M M0066	<ol> <li>A Bioassessment Approach for Mid-Continent Great Rivers: the Upper Mississippi, Missouri, and Ohio (USA)</li> <li>Using Stressor Gradients to Determine Reference Expectations for Great River Fish Assemblages</li> </ol>	Dr. Angradi, Theodore (Ted) R. (50%) Mr. Pearson, Mark S. (7%) Dr. Bolgrien, David W. (5%) Ms. Jicha, Terri M. (5%) Dr. Hill, Brian H. (5%) Ms. Taylor, Debra L. (5%) Ms. Blocksom, Karen A. (5%) Mr. Batterman, Allan R. (3%) Dr. Moffett, Mary F. (3%) Ms. Elonen, Colleen M. (3%) Mr. Anderson, Leroy E. (3%) Mr. Shepard, Larry J. (3%) Dr. Schweiger, E. William (3% Non-EPA)
S09OR 0069	Parameters of Dose-Response are on the Boundary: What Happens with BMDL?	NHEERL  Dr. Kopylev, Leonid (50%)  Dr. Fox, John (50%)
		NCEA
S09OR 0073	Pb Isotopes in Drinking Water: A New Strategy for Source Detection of Low Pb Sources	Dr. Sidle, William (90%) Mr. Haught, Roy (10%) NRMRL
Linked With		
S09RM 0090	Vulnerability of Headwater Catchment Resources to Incidences of Pb-210 Excess and Cs-137 Radionuclide Fallout	Dr. Sidle, William (100%)  NRMRL
S09RA 0076	Repeating History: Pharmaceuticals in the Environment	Dr. Ankley, Gerald T. (50%) Dr. Sumpter, John P. (20% Non-EPA) Dr. Brooks, Bryan W. (15% Non-EPA) Dr. Huggett, Duane B. (15% Non-EPA)
		NHEERL

Nom.	Titles and Citations of Submitted Papers	
	Titles and Citations of Submitted Lapers	Authors* and Nominating Organization
0088	Infiltration of Urban Storm Water Runoff: A Case	Dr. Shuster, William D. (60%) Mr. Gehring, Richard (35% Non-EPA) Mr. Gerken, Jon (5% Non-EPA)
		NRMRL
0089	Success- a Perspective Incorporating Current Studies	Dr. Shuster, William D. (65%) Dr. Morrison, Matthew A. (30%) Ms. Webb, Rachel M. (5% Non-EPA)
		NRMRL
	of Nitroaromatics by Fe(II) Species	Dr. Colon, Dalizza (80%) Dr. Weber, Eric J. (10%) Dr. Anderson, James L. (10% Non-EPA)
		NERL
	Using Path-Integrated Optical Remote Sensing	Dr. Thoma, Eben D. (25%) Mr. Shores, Richard C. (25%) Dr. Isakov, Vlad (25%) Dr. Baldauf, Richard W. (25%)
		NRMRL
097	Monomethylarsonous Acid and Monomethylthioarsonic Acid in Complex Matrix (2) Investigation of the pH Effects on the Formation of Methylated Thio-Arsenicals, and the Effects of pH and Temperature on their Stability	Dr. Creed, John T. (29%) Dr. Creed, Patricia A. (20%) Ms. Schwegel, Carol A. (8%) Dr. Conklin, Sean D. (17% Non-EPA) Dr. Yathavakilla, Santha Ketavarapu V. (15% Non-EPA) Dr. Fricke, Michael W. (5% Non-EPA) Dr. Heitkemper, Douglas T. (2% Non-EPA) Dr. Shockey, Nohora V. (2% Non-EPA) Dr. Caruso, Joseph A. (2% Non-EPA)
		NERL
098	Over Soybean Using the Modified Bowen-Ratio Technique	Dr. Walker, John T. (85%) Dr. Robarge, Wayne (5% Non-EPA) Dr. Wu, Yihua (5% Non-EPA) Dr. Meyers, Tilden (5% Non-EPA)
		NRMRL

Nom.	Titles and Citations of Submitted Papers	Authors* and Nominating Organization
S09ER	(1) Quantification of Phenol, Phenyl Glucuronide,	Mr. Nichols, John (25%)
0011	and Phenyl Sulfate in Blood of Unanesthetized	Mr. Hoffman, Alex (25%)
	Rainbow Trout by Online Microdialysis Sampling	Mr. Fitzsimmons, Patrick (25%)
		Mr. Lien, Gregory (15%)
	(2) Use of Online Microdialysis Sampling to	Ms. Jenson, Correne (10%)
	Determine the in vivo Rate of Phenol	(,
	Glucuronidation in Rainbow Trout	NHEERL
509ER	Assessing Vulnerabilities from Alternative	Dr. Mehaffey, Megan (30%)
0013	Development Patterns	Mr. Wade, Timothy (10%)
		Dr. Smith, Betsy (10%)
		Dr. Wainger, Lisa (20% Non-EPA)
		Mr. Yankee, Dennis (10% Non-EPA)
		Ms. Bott, Vicki (10% Non-EPA)
		Ms. Yarbrough, Rebecca (10% Non-EPA)
		NERL
S09ER	(1) Using a Geographic Information System to	Dr. Pfleeger, Thomas (25%)
0020	Identify Areas with Potential for Off-Target	Dr. Olszyk, David (25%)
	Pesticide Exposure	Ms. Burdick, Connie (20%)
		Dr. Lee, E. Henry (10%)
	(2) Selecting and Evaluating Native Plants for	Dr. King, George (5% Non-EPA)
	Region-Specific Phytotoxicity Testing	Mr. Plocher, Milton (5% Non-EPA)
		Mr. Kern, Jeffery (5% Non-EPA)
		Dr. Fletcher, John (5% Non-EPA)
		NHEERL
S09ER	(1) The Role of Particulate Matter-Associated Zinc	Dr. Kodavanti, Urmila P. (25%)
0022	in Cardiac Injury in Rats	Ms. Schladweiler, Mette C. (10%)
		Dr. Karoly, Edward D. (8%)
	(2) Systemic Imbalance of Essential Metals and	Mr. Ledbetter, Allen D. (5%)
	Cardiac Gene Expression in Rats Following Acute	Mr. McGee, John K. (5%)
	Pulmonary Zinc Exposure	Ms. Schmidt, Judy (5%)
		Ms. Richards, Judy E. (5%)
		Dr. Costa, Daniel L. (2%)
		Mr. Jaskot, Richard H. (2%)
		Dr. Gilmour, Peter S. (10% Non-EPA)
		Dr. Mandavilli, Bhaskar S. (5% Non-EPA)
		Dr. Nyska, Abraham (5% Non-EPA)
		Dr. Thomas, Ronald (3% Non-EPA)
		Ms. Wallenborn, J. Grace (2% Non-EPA)
		Dr. Christiani, David C. (2% Non-EPA)
		Dr. Runge, Marschall S. (2% Non-EPA)
		Dr. Peddada, Shyamal (2% Non-EPA)
		Dr. Nageswara, Madamanchi (2% Non-EPA)
		NHEERL

18

documented in the EPA nomination

Titles and Citations of Submitted Papers	Authors* and Nominating Organization
Development of a Human Physiologically Based Pharmacokinetic (PBPK) Model for Inorganic Arsenic and its Mono-and Di-Methylated	Dr. El-Masri, Hisham A. (50%) Dr. Kenyon, Elaina M. (50%) NHEERL
<ol> <li>(1) Children's Health Risk Assessment:         Incorporating a Lifestage Approach into the Risk Assessment Process     </li> <li>(2) A Lifestage Approach to Assessing Children's Exposure</li> <li>(3) A Lifestage-Specific Approach to Hazard and Dose-Response Characterization for Children's Health Risk Assessment</li> </ol>	Ms. Brown, Rebecca C. (20%) Dr. Hubal, Elaine Cohen (15%) Dr. Makris, Susan L. (15%) Dr. Thompson, Chad M. (11%) Dr. Euling, Susan Y. (8%) Ms. Kimmel, Carole A. (8%) Dr. Moya, Jacqueline (8%) Dr. Barone, Jr., Stanley (5%) Dr. Selevan, Sherry G. (5%) Dr. Sonawane, Babasaheb R. (5%)
	NCEA
(1) Automated Determination of Precursor Ion, Product Ion, and Neutral Loss Compositions and Deconvolution of Composite Mass Spectra Using Ion Correlation Based on Exact Masses and Relative Isotopic Abundances  (2) An Inexpensive Autosampler to Maximize Throughput for an Ion Source that Samples Surfaces in Open Air  (3) An Integrated Wipe Sample Transport/Autosampler to Maximize Throughput for a Direct Analysis in Real Time (Dart)/Orthogonal Acceleration, Time-of-Flight Mass Spectrometer (oa-TOFMS)	Dr. Grange, Andrew H. (95%) Dr. Sovocool, G. Wayne (5%)  NERL
<ol> <li>Water Quality in Great Lakes Coastal Wetlands: Basin-Wide Patterns and Responses to an Anthropogenic Disturbance Gradient</li> <li>Human Influences on Water Quality in Great Lakes Coastal Wetlands</li> </ol>	Dr. Trebitz, Anett S. (20%) Dr. Morrice, John A. (20%) Ms. Cotter, Anne C. (15%) Dr. Brazner, John C. (5%) Dr. Kelly, John R. (5%) Mr. Knuth, Michael L. (5%) Mr. Peterson, Gregory (5%) Dr. Sierszen, Michael E. (5%) Ms. Thompson, Jo A. (5%) Dr. Danz, Nicholas P. (5% Non-EPA) Dr. Hollenhorst, Tom (4% Non-EPA) Dr. Niemi, Gerald J. (2% Non-EPA) Dr. Reavie, Euan D. (2% Non-EPA) Dr. Axler, Richard P. (1% Non-EPA) Dr. Regal, Ronald R. (1% Non-EPA)
	Pharmacokinetic (PBPK) Model for Inorganic Arsenic and its Mono-and Di-Methylated Metabolites  (1) Children's Health Risk Assessment: Incorporating a Lifestage Approach into the Risk Assessment Process  (2) A Lifestage Approach to Assessing Children's Exposure  (3) A Lifestage-Specific Approach to Hazard and Dose-Response Characterization for Children's Health Risk Assessment  (1) Automated Determination of Precursor Ion, Product Ion, and Neutral Loss Compositions and Deconvolution of Composite Mass Spectra Using Ion Correlation Based on Exact Masses and Relative Isotopic Abundances  (2) An Inexpensive Autosampler to Maximize Throughput for an Ion Source that Samples Surfaces in Open Air  (3) An Integrated Wipe Sample Transport/Autosampler to Maximize Throughput for a Direct Analysis in Real Time (Dart)/Orthogonal Acceleration, Time-of-Flight Mass Spectrometer (oa-TOFMS)  (1) Water Quality in Great Lakes Coastal Wetlands: Basin-Wide Patterns and Responses to an Anthropogenic Disturbance Gradient  (2) Human Influences on Water Quality in Great Lakes Coastal Wetlands

*Note: The percentages given after each name represent the current percent of the total level of effort as documented in the EPA nomination

Nom.	Titles and Citations of Submitted Papers	Authors* and Nominating Organizatio
S09M	Survey Design and Extent Estimates for the	Dr. Olsen, Anthony R. (70%)
M0051	Wadeable Streams Assessment	Mr. Peck, David V. (30%)
		NHEERL
S09M	A Process for Creating Multimetric Indices for	Dr. Stoddard, John L. (50%)
M0058	Large-Scale Aquatic Surveys	Mr. Peck, David V. (10%)
		Ms. Tarquinio, Ellen (10%)
		Dr. Herlihy, Alan T. (10% Non-EPA)
		Dr. Hughes, Robert M. (10% Non-EPA)
		Mr. Whittier, Thomas (10% Non-EPA)
		NHEERL
S09M	Combining Existing Monitoring Sites with a	Dr. Paul, John F. (14%)
M0059	Probability Survey Design-Examples from U.S.	Dr. Walker, Henry A. (13%)
	EPA's National Coastal Assessment	Mr. Galloway, Walter B. (13%)
		Dr. Pesch, Gerald G. (13%)
		Mr. Cobb, Donald J. (13%)
		Mr. Strobel, Charles J. (13%)
		Dr. Summers, J. Kevin (13%)
		Mr. Charpentier, Michael (4% Non-EPA)
		Dr. Heltshe, James (4% Non-EPA)
		NHEERL
S09M	(1) A Roughness-Corrected Index of Relative Bed	Dr. Kaufmann, Philip R. (80%)
M0063	Stability for Regional Stream Surveys	Dr. Larsen, David P. (4%)
		Dr. Shirazi, Mostafa A. (1%)
	(2) Geomorphic and Anthropogenic Influences on	Dr. Faustini, John M. (10% Non-EPA)
	Fish and Amphibians in Pacific Northwest Coastal Streams	Dr. Hughes, Robert M. (5% Non-EPA)
		NHEERL
	(1) Persistence of Nontuberculous Mycobacteria in a	
0068	Drinking Water System after Addition of Filtration	Mr. Covert, Terry C. (15%)
	Treatment	Dr. Harris, Stephanie I. (8%)
		Ms. Bailey, Stephanie A. (7%)
	(2) Molecular Comparison of Mycobacterium avium	
	Isolates from Clinical and Environmental Sources	Dr. Stelma, Jr., Gerard N. (4%)
		Mr. Schmitt, Michael T. (3%)
		Mr. Yakrus, Mitchell A. (15% Non-EPA)
		Ms. Donnelly, Sandra F. (10% Non-EPA)
		Mr. Toney, Sean (3% Non-EPA)
		NHEERL
S09RA 0079	Biomarkers of Exposure: a Case Study with	Dr. Hughes, Michael (100%)
UU/7	Inorganic Arsenic	NHEERL
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Nom.	Titles and Citations of Submitted Papers	Authors* and Nominating Organization
S09RA 0081	(1) Aqueous Microwave Chemistry: A Clean and Green Synthetic Tool for Rapid Drug Discovery	Dr. Varma, Rajender S. (50%) Dr. Polshettiwar, Vivek (50% Non-EPA)
	(2) Greener and Expeditious Synthesis of Bioactive Heterocycles using Microwave Irradiation	
	(3) Greener and Sustainable Approaches to the Synthesis of Pharmaceutically Active Heterocycles	NRMRL
S09RA 0084	(1) Role of Environmental Factors in the Timing of Puberty	Dr. Euling, Susan Y. (29%) Dr. Selevan, Sherry G. (14%) Dr. Gray, Jr., L. Earl (7%)
	(2) Examination of US Puberty-Timing Data from 1940 to 1994 for Secular Trends: Panel Findings	Dr. Buck Louis, Germaine M. (7% Non-EPA) Dr. Marcus, Michele (7% Non-EPA)
	(3) Environmental Factors and Puberty Timing: Expert Panel Research Needs	Dr. Herman-Giddens, Marcia (5% Non-EPA) Dr. Lee, Peter A. (5% Non-EPA) Dr. Pescovitz, Ora Hirsch (3% Non-EPA) Dr. Skakkebaek, Niels E. (3% Non-EPA) Dr. Juul, Anders (3% Non-EPA) Dr. Sorensen, Thorkild I.A. (3% Non-EPA)
		Dr. Ojeda, Sergio R. (1% Non-EPA) Dr. Witchel, Selma Feldman (1% Non-EPA) Dr. Sippell, Wolfgang (1% Non-EPA) Mr. Abbott, David H. (1% Non-EPA)
		Dr. Soto, Ana M. (1% Non-EPA) Dr. Tyl, Rochelle W. (1% Non-EPA) Dr. Bourguignon, Jean-Pierre (1% Non-EPA) Dr. Swan, Shanna H. (1% Non-EPA) Dr. Golub, Mari S. (1% Non-EPA)
		Dr. Wabitsch, Martin (1% Non-EPA) Dr. Toppari, Jorma (1% Non-EPA) Dr. Dunkel, Leo (1% Non-EPA) Dr. Himes, John H. (1% Non-EPA) Dr. Teilmann, Grete (1% Non-EPA)
		NCEA
S09RM 0086	(1) Correlation of 2-Chlorobiphenyl Dechlorination by Fe/Pd with Iron Corrosion at Different pH	Dr. Al-Abed, Souhail R. (70%) Dr. Fang, Yuanxiang (30% Non-EPA)
	(2) Dechlorination Kinetics of Monochlorobiphenyls by Fe/Pd: Effects of Solvent, Temperature, and PCB Concentration	NRMRL
S09TF0 093	(1) Chemical Characterization of Ambient Particulate Matter Near the World Trade Center: Source Apportionment Using Organic and Inorganic Source Markers	Dr. Olson, David A. (35%) Dr. Norris, Gary A. (25%) Mr. Seila, Robert L. (20%) Dr. Landis, Matthew S. (10%) Dr. Vette, Alan F. (10%)
	(2) Chemical Characterization of Volatile Organic Compounds Near the World Trade Center: Ambient Concentrations and Source Apportionment	NERL

Nom.	Titles and Citations of Submitted Papers	Authors* and Nominating Organization
S09TF0 095	(1) Cumulative Effects of Dibutyl Phthalate and Diethylhexyl Phthalate on Male Rat Reproductive Tract Development: Altered Fetal Steroid Hormones and Genes  (2) A Mxiture of Seven Antiandrogens Induces Reproductive Malformations in Rats	Dr. Howdeshell, Kembra (32%) Mr., Johnathan Furr (20%) Dr. Gray, Jr., Leon Earl (18%) Dr. Wilson, Vickie S. (10%) Ms. Lambright, Christy (10%) Dr. Rider, Cynthia (10% Non-EPA)
	(3) A Mixture of Five Phthalate Esters Inhibits Fetal Testicular Testosterone Production in the Sprague- Dawley Rat in a Cumulative, Dose-Additive Manner	NHEERL
S09TF0 102	(1) Method for Measuring Air-Immiscible Liquid Partition Coefficients	Dr. Simon, Michelle A. (90%) Dr. Brusseau, Mark L. (10% Non-EPA)
	(2) Analysis of a Gas-Phase Partitioning Tracer Test Conducted in an Unsaturated Fractured-Clay Formation	NRMRL
S09TF0 105	Resolving Local-Scale Emissions for Modeling Air Quality Near Roadways	Dr. Isakov, Vlad (40%) Mr. Cook, James Richard (30%) Mr. Touma, Jawad S. (16%) Dr. Thurman, James (5%) Dr. Benjey, Bill (5%) Ms. Kinnee, Ellen (2% Non-EPA) Mr. Ensley, Darrell (2% Non-EPA)
S09TF0 107	Perchlorate Behavior in a Municipal Lake Following Fireworks Displays	NVFEL  Dr. Wilkin, Richard T. (65%) Dr. Fine, Dennis G. (20% Non-EPA) Ms. Burnett, Nicole G. (15% Non-EPA)  NRMRL
S09TF0 109	Evaluation of Three Watershed-Scale Pesticide Environmental Transport and Fate Models	Dr. Parker, Ronald D. (30%) Dr. Barrett, Michael (10%) Dr. Burns, Lawrence (10%) Dr. Arnold, J. G. (10% Non-EPA) Dr. Carrubba, Lee (10% Non-EPA) Dr. Snyder, N. J. (10% Non-EPA) Dr. Srinivasan, R. (10% Non-EPA) Ms. Neitsch, S. L. (10% Non-EPA)
COOTEO	Chlorovrifos Transformation by Aguagus Chlorina	
	Chlorpyrifos Transformation by Aqueous Chlorine in the Presence of Bromide and Natural Organic Matter	Dr. Duirk, Stephen E. (75%) Dr. Collette, Timothy W. (15%) Mr. Tarr, J. C. (10% Non-EPA)
		NERL

Nom.	nations Recommended for Honorable Me Titles and Citations of Submitted Papers	Authors* and Nominating Organization
S09EE0	(1) High Permeability Membranes for the	Dr. Namboodiri, Vasudevan V. (55%)
114	Dehydration of Low Water Content Ethanol by	Dr. Vane, Leland M. (30%)
	Pervaporation	Dr. Ponangi, Ravi P. (15% Non-EPA)
	(2) A Novel Hydrophilic Polymer Membrane for the	
	Dehydration of Organic Solvents	NRMRL
Linked With		
S09EE0	Membrane-Assisted Vapor Stripping: Energy	Dr. Vane, Leland M. (60%)
003	Efficient Hybird Distillation-Vapor Permeation Process for Alcohol-Water Separation	Mr. Alvarez, Franklin R. (40%)
	1	NRMRL

*Note: The percentages given after each name represent the current percent of the total level of effort as documented in the EPA nomination

#### Key to Acronyms used in the above Tables

NCCT - National Center for Computational Toxicology

NCEA - National Center for Environmental Research

NERL - National Exposure Research Laboratory

NHEERL - National Health and Environmental Effects Laboratory

NHSRC - National Homeland Security Research Center

NRMRL - National Risk Management Research Laboratory

NVFEL - National Vehicle and Fuel Emissions Laboratory

OAQPS - Office of Air Quality Planning and Standards

*OPP – Office of Pesticide Programs* 

OPPTS - Office of Pollution Prevention and Toxic Substances