

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON D.C. 20460

OFFICE OF THE ADMINISTRATOR SCIENCE ADVISORY BOARD

September 29, 2015

EPA-SAB-15-014

The Honorable Gina McCarthy Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

Subject: SAB Recommendations for EPA's FY 2015 Scientific and Technological Achievement Awards

Dear Administrator McCarthy:

The EPA Science Advisory Board (SAB) is pleased to transmit its recommendations for the EPA's FY 2015 Scientific and Technological Achievement Awards (STAA). The STAA program was established by the agency in 1980 to recognize EPA employees who have made outstanding contributions to the advancement of science and technology through their publications in peer-reviewed articles or books. Additional objectives of the STAA program include making the general public more aware of the quality and depth of EPA science, and improving the credibility of the science underpinning agency decisions. The SAB has been asked by EPA's Office of Research and Development to review EPA's nominated scientific publications and make recommendations for awards. The SAB is pleased to continue to play this important role in the STAA program.

This year, the SAB reviewed a total of 116 nominations comprised of 195 publications within 13 science and technology categories. The SAB recommends: one nomination for Level I, the highest award; three nominations for Level II; 38 nominations for Level III; and 42 nominations for Honorable Mention. The SAB's recommendations are provided in the enclosed report.

Overall, the SAB commends the agency for its publications and finds that the 2015 STAA nominations were generally of very good quality. Although only one of this year's nominations met the strict criteria for the highest level award, and three nominations met criteria for the Level II award, the SAB assures the EPA that its scientists are doing high quality work that has maximal public and environmental health benefits. In addition, the SAB appreciates the agency's implementation of most SAB recommendations from previous years for improving the nomination procedures and administration of the STAA program.

The SAB recommends that the EPA implement the following activities to further strengthen the STAA program as well as facilitating the SAB review of future STAA nominations:

- Review articles that are submitted for awards should include a critical synthesis of the literature and provide new insights based on this synthesis.
- Nominations involving similar authors on similar topics should be combined into one

nomination.

- The EPA should improve the process for generating nominations and processing awards.
- The EPA should clarify the criteria for the different STAA award levels, and enhance the process for STAA nominations.

The SAB understands that the EPA is in the process of improving the STAA nomination and award generation process, and encourages the agency to implement such improvements as quickly as possible.

The agency is commended for again successfully administering its annual STAA program and the SAB applauds the EPA's public recognition of the scientific work of EPA scientists and engineers that is published in the peer-reviewed literature. 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 2016 STAA nominations.

Sincerely,

/Signed/

Dr. Peter S. Thorne Chair Science Advisory Board /Signed/

Dr. George Daston Chair SAB 2015 Scientific and Technological Achievement Awards Committee

Enclosure

NOTICE

This report has been written as part of the activities of the EPA Science Advisory Board, a public advisory group providing extramural scientific information and advice to the Administrator and other officials of the Environmental Protection Agency. The Board is structured to provide balanced, expert assessment of scientific matters related to the problems facing the agency. This report has not been reviewed for approval by the agency and, hence, the contents of this report do not represent the views and policies of the Environmental Protection Agency, nor of other agencies in the Executive Branch of the Federal government, nor does mention of trade names or commercial products constitute a recommendation for use. Reports of the EPA Science Advisory Board are posted on the EPA website at http://www.epa.gov/sab.

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1. BACKGROUND

EPA's Scientific and Technological Achievement Awards program (STAA) was established in 1980 to recognize the agency's scientists and engineers who published their technical work in the peer-reviewed literature. The STAA program is administered and managed by the EPA Office of Research and Development (ORD). Each year, the EPA Science Advisory Board (SAB) has been asked to review the EPA's nominated scientific publications and make recommendations for awards. The SAB was charged to review nominations and provide recommendations for each nomination in consideration of the EPA's criteria for STAA awards. The EPA announced the call for nominations for the 2015 STAA program to senior managers and employees in December 2014 (Appendix A). ORD screened nominations for conformance with EPA's *STAA Nomination Procedures and Guidelines*. The Guidelines describe the award levels, eligibility criteria, and the award criteria.

The EPA's criteria for STAA Program awards are as follows:

- <u>Level I awards</u> 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.
- <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.
- <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.
- <u>Honorable Mention</u> is 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 SAB wants to encourage; or (3) show an area of research that the SAB believes is too preliminary to warrant an award recommendation at this time.

2. SAB REVIEW PROCEDURE

The SAB Staff Office formed a new SAB STAA Committee in 2015 to review EPA's 2015 STAA nominations. The Committee members were invited to serve for a one-year term. 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).

All EPA nominations and nomination evaluation criteria were provided to the SAB Committee in advance of the review meeting. The SAB review consisted of a two-step process: an initial review of each nomination, followed by a Committee discussion of all nominations. The initial review of each nomination was conducted by two or three members. Committee members provided their individual initial ratings of the nominations based on the EPA's award criteria as described in Section 1.

In May 2015, ORD submitted to the SAB Staff Office 118 nominations for 2015 STAA awards in 13 science and technology categories. The SAB STAA Committee met at a closed meeting on July 9-10, 2015, in Washington, DC. The meeting was closed to the public because the Committee discussions involved personnel matters, including the relative merits of various employees and their respective work, the disclosure of which would be a clearly unwarranted invasion of personal privacy and, therefore, protected from disclosure by section (c)(6) of the Government in the Sunshine Act, 5 U.S.C. 552b(c)(6). Committee members discussed all nominations (see Table 1), and reached consensus on the recommendations for awards. To avoid an appearance of bias or a loss of impartiality, some members were asked to recuse themselves from the Committee deliberations on selected nominations. The Committee also discussed administrative recommendations for improving the STAA nomination process.

The Committee did not review two submitted nominations because the Committee found that both nominations were very similar to two other 2015 nominations involving the same authors. The Committee concluded that agency's nominating officials should have combined these four nominations into two nominations.

On September 10, 2015, the chartered SAB held a closed meeting to consider the recommendations of the 2015 STAA Committee.

Торіс	Number of Nominations Submitted to SAB
Control Systems and Technology	3
Ecological Research	12
Energy and the Environment	0
Environmental Policy and Decision-making Studies	5
Health Effects Research and Human Health Risk	21
Assessment	
Homeland Security	3
Industry and the Environment	4
Integrated Risk Assessment	4
Monitoring and Measurement Methods	11
Other Environmental Research	8
Review Articles	10
Risk Management and Ecosystem Restoration	7
Sustainability and Innovation	14
Transport and Fate	16
TOTAL	118*

Table 1. 2015 STAA Nominations by Topic Category

*The Committee did not review two submitted nominations because they were very similar to two other 2015 nominations involving the same authors.

3. AWARD RECOMMENDATIONS

Table 2 summarizes the awards by year for the last 10 years, including the recommendations for 2015. For 2015, the Committee recommended: one nomination for Level I, the highest award; three nominations for Level II; 38 nominations for Level III; and 42 nominations for Honorable Mention. Appendix B lists the recommended awards for Levels I through III, and nominations that deserve an Honorable Mention. The final rankings were agreed to by consensus at the STAA Committee meeting on July 9-10, 2015 and discussed and approved by the chartered SAB on September 10, 2015. Table 3 summarizes the distribution of 2015 award recommendations among categories for all nominations reviewed by the Committee.

	Table 2. Companyon of Award Accommendations over Time										
Award Level	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Nominations Reviewed	110	90	140	130	109	121	130	104	117	72	116
Level I	3 (3%)	5 (6%)	5 (4%)	5 (4%)	3 (3%)	5 (4%)	3 (2%)	4 (4%)	0	1 (1%)	1 (1%)
Level II	6	11	13	16	22	14	13	10	10	2	3
	(5%)	(12%)	(9%)	(12%)	(20%)	(12%)	(10%)	(10%)	(9%)	(3%)	(3%)
Level III	30	29	37	30	31	42	35	29	27	20	38
	(27%)	(32%)	(26%)	(21%)	(28%)	(35%)	(27%)	(28%)	(23%)	(28%)	(33%)
Honorable	31	26	45	43	25	33	44	36	45	29	42
Mention	(28%)	(29%)	(32%)	(33%)	(23%)	(27%)	(34%)	(35%)	(38%)	(40%)	(36%)
Not	40	19	40	36	28	27	35	25	35	20	32
Recommended	(36%)	(21%)	(29%)	(28%)	(26%)	(22%)	(27%)	(24%)	(30%)	(28%)	(27%)

Table 2. Comparison of Award Recommendations Over Time

Nomination Categories	Total	Award Levels				Honorable Mention
	Nominations Reviewed	Ι	II	III	Total	
Control Systems and Technology	3	0	0	1	1	0
Ecological Research	13	0	0	7	7	4
Energy and the Environment	0	0	0	0	0	0
Environmental Policy and Decision-making Studies	5	1	0	1	2	2
Health Effects Research and Human Health Risk Assessment	20	0	1	7	8	6
Homeland Security	3	0	0	1	1	2
Industry and the Environment	4	0	0	2	2	2
Integrated Risk Assessment	4	0	0	2	2	2
Monitoring and Measurement Methods	11	0	0	4	4	3
Other Environmental Research	8	0	1	3	4	2
Review Articles	10	0	0	1	1	4
Risk Management and Ecosystem Restoration	7	0	0	1	1	4
Sustainability and Innovation	14	0	0	5	5	5
Transport and Fate	14	0	1	3	4	6
TOTALS:	116	1	3	38	42	42

 Table 3. Summary of Award Recommendations by Category for FY2015

4. ADMINISTRATIVE RECOMMENDATIONS

The SAB appreciates the EPA's implementation of the recommendations from the recent SAB reports to the Administrator that improve the nomination process and enhance the integrity of the STAA program. In particular, the SAB concludes that the strong majority of the 2015 nominations adhered to existing STAA program guidelines.

The SAB has the following recommendations to further strengthen the STAA program in future years:

- *Review articles that are submitted for awards should include a critical synthesis of the literature and provide new insights based on this synthesis.* The 2015 STAA nominations contained 10 review articles and, as in previous years, several of the nominated review articles lacked a critical synthesis of the literature. While reviews that summarize a body of literature are useful and important, the SAB believes that review articles that critically synthesize and evaluate information and lead to new insights, with an assessment on future perspectives, are most consistent with the criteria for STAA awards. Review articles should adhere to best practices for systematic reviews regardless of whether they are quantitative (with statistical meta-analysis) or qualitative reviews. Such best practices include, for example, exact reporting of literature search strategies and terms, inclusion/exclusion criteria for articles, and handling of publication bias. Desirable outcomes for review articles include major advances in understanding the topic of review, and delineation of critical knowledge gaps that serve to focus and increase efficiency of the research topic. Submission of review articles that do not fit these criteria are not anticipated to be competitive.
- Nominations involving similar authors on similar topics should be combined into one nomination. The Committee did not review two submitted nominations because the Committee found that both nominations were very similar to two other 2015 nominations involving the same authors. The Committee concluded that agency's nominating officials should have combined these four nominations into two nominations. As noted previously in SAB's 2008, 2009 and 2010 reports to the Administrator, the agency should discourage the practice of submission of multiple nominations of papers involving the same EPA author(s) on similar topical areas.
- Improve the process for generating nominations and processing awards. As noted in previous SAB reports to the Administrator, the EPA should ensure that submitted nominations are delivered to the SAB in a timely manner. The SAB also remains concerned that a significant time lag exists between the EPA's receipt of SAB recommendations for STAA recognition and the EPA's notifications to STAA award recipients. In particular, the SAB provided the EPA with its recommendations for 2014 STAA recognition in January 2015, and the EPA's notifications to STAA award recipients occurred in August 2015. The SAB understands that the EPA is in the process of improving the STAA nomination and award generation process through the development and implementation of an automated nomination and award processing system, and encourages the agency to implement such improvements as quickly as possible. This should facilitate the submission, review and award generation processes.
- *Clarify the criteria established by the EPA for the different STAA award levels, and enhance the process for STAA nominations.* Within EPA's STAA criteria description for "Honorable Mention," EPA should revise "area of research" to "achievement of research." Also, in order to encourage an increased number of high quality STAA nominations, the EPA should debrief previous Level I and II STAA award-winning authors on the factors that influenced their production of high quality

research and how STAA recognition has affected their career, and adjust the STAA nomination procedures based on this feedback. In addition, to help distinguish between the different levels of award and illustrate to nominators the quality of research that received previous high-level STAA recognition, the SAB recommends that examples of previous Level I and II STAA award-winning publications be highlighted on the STAA nomination website.

APPENDIX A: CALL FOR NOMINATIONS FOR THE 2015 STAA PROGRAM

December 16, 2014

MEMORANDUM

SUBJECT: The 2015 Scientific and Technological Achievement Awards (STAA) Program

- FROM: Lek G. Kadeli Acting Assistant Administrator
- TO: Assistant Administrators Associate Administrators Regional Administrators

It is a pleasure to announce this year's call for nominations for the 2015 Scientific and Technological Achievement Awards (STAA) program. STAA is an Agency-wide competition, judged by the Science Advisory Board (SAB), which recognizes outstanding published scientific and technical papers by the Agency's staff. This year's nominations will be accepted via electronic submission to nominations.STAA@epa.gov.

Attached are (1) nomination procedures and guidelines, (2) review schedule, and (3) nomination form. Official 2015 nomination forms are available for your convenience in MS Word at http://epa.gov/ncer/staa/. All nominations must be received no later than midnight ET Thursday, February 5, 2015. Instructions for completion and electronic submission of nomination packages are attached. Should questions arise, please contact Ben Packard at (703) 347-8087 or packard.benjamin@epa.gov.

Attachment(s)

cc: EPA Science Advisory Board EPA Program Offices EPA Regional Offices ORD Center/Laboratory Directors

December 16, 2014

EPA SEEKING APPLICATIONS FOR 2015 STAA AWARDS

MEMORANDUM

SUBJECT: The 2015 Scientific and Technological Achievement Awards (STAA) Program

FROM: Lek G. Kadeli Principal Deputy Assistant Administrator

TO: All EPA Employees

I am pleased to issue this year's call for nominations for the EPA's prestigious 2015 Scientific and Technological Achievement Awards (STAA). Each year, EPA recognizes outstanding papers written by the Agency's staff and published in scientific and technical journals. Not only do these peer-reviewed publications represent the quality and depth of EPA science, but they provide foundational support to agency decision-making and the advancement of science. Administrator McCarthy emphasized the importance of this advancement at the 2014 National Academy of Sciences annual meeting:

"Science has been the backbone of the most significant advancements EPA has made in the past four decades and continues to be the engine that drives American prosperity and innovation in the future" -- Administrator McCarthy, National Academy of Sciences

Each year, EPA scientists are published in numerous peer reviewed journals upholding the highest levels of quality and performance, while also maintaining credibility among our peers and scientific communities. Each publication is not only a commendable, personal accomplishment to the author but also a supporting achievement and action contributing to our EPA Agency Themes:

-Making a Visible Difference in Communities across the Country
-Addressing Climate Change and Improving Air Quality
-Taking Action on Toxics and Chemical Safety
-Protecting Water: A Precious, Limited Resource
-Launching a New Era of State, Tribal and Local Partnerships
-Embracing EPA as a High Performing Organization
-Working Toward a Sustainable Future

Accomplishing the agency themes articulated by Administrator McCarthy requires the application of sound science to the assessment of environmental problems and the evaluation of possible solutions. Thus, the far-reaching impacts from EPA scientists cannot be understated and are evident in everything the Agency does.

Nominations to recognize our EPA published papers begins today and is open to *all* EPA employees. Nominations are judged by the EPA's Science Advisory Board (SAB), and the STAA program is managed by the Office of Research and Development. Nominations can be submitted in the following categories:

- Control Systems and Technology

- Ecological Research
- Health Effects Research and Human Health Risk Assessment
- Monitoring and Measurement Methods
- Transport and Fate
- Review Articles
- Risk Management and Ecosystem Restoration
- Integrated Risk Assessment
- Environmental Policy and Decision-Making Studies
- Homeland Security
- Industry and the Environment
- Energy and the Environment
- Sustainability and Innovation
- Other Environmental Research

This year's nominations will be accepted via electronic submission to nominations.STAA@epa.gov. You can find the nomination forms and guidelines and additional information about the STAA program at www.epa.gov/ncer/staa/.

Nominations will be accepted until midnight ET on Thursday, February 5th. Should questions arise, please contact Ben Packard at (703) 347-8087 or packard.benjamin@epa.gov.

Attachment(s)

APPENDIX B: NOMINATIONS RECOMMENDED FOR 2015 STAA AWARDS

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

	Nominations Recommended for a Level I Award One					
Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization				
S15EP0009	 (1) Use of Statistical Modeling to Reassess the Performance Standard for the AOAC Use-Dilution Methods (1) Performance of the AOAC Use-dilution Method with 	Tomasino, Stephen F. (65%) Parker, Albert E. (20% non-EPA) Hamilton, Martin A. (10% non- EPA)				
	Targeted Modifications: Collaborative Study Journal of AOAC International, 97(1):68-77 Journal of AOAC International, 95(6):1618-1628	Hamilton, Gordon C. (5% non- EPA) OPP				

	Nominations Recommended for a Level II Award Total of 3				
Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization			
S15HE0028	Cardiopulmonary Toxicity of Peat Wildfire Particulate Matter and the Predictive Utility of Precision Cut Lung Slices Particle and Fibre Toxicology, 11(29):1-17	Gilmour, M. Ian (40%) Krantz, Q. Todd (10%) Tong, Haiyan (5%) McGee, John (5%) Hays, Michael (5%) Kovalcik, Kasey (5%) Dye, Janice A. (5%) Boykin, Elizabeth (1%) Daniels, Mary (1%) Kim, Yong Ho (23% non-EPA) NHEERL			
\$15OR0073	 (1) Relative Importance of Nitrite Oxidation by Hypochlorous Acid under Chloramination Conditions Environmental Science & Technology, 46(11):6056-6064 (2) A Proposed Abiotic Reaction Scheme for Hydroxylamine and Monochloramine under Chloramination Relevant Drinking Water Conditions Water Research, 60:218-227 (3) Hydroxylamine Addition Impact to Nitrosomonas europaea Activity in the Presence of Monochloramine Water Research, 68:719-730 	Wahman, David G. (75%) Speitel, Jr., Gerald E. (20% non- EPA) Machavaram, Madhav V. (5% non- EPA) NRMRL			
S15TF0118	 (1) Decades-Scale Degradation of Commercial, Side-Chain, Fluorotelomer-Based Polymers in Soils and Water Environmental Science & Technology, :A-1 (2) Characterizing Fluorotelomer and Perfluoroalkyl Substances in New and Aged Fluorotelomer-Based Polymers for Degradation Studies with GC/MS and LC/MS/MS Environmental Science and Technology, 48(10):5762-5769 	Washington, John W. (63%) Naile, Jonathan E. (26%) Lynch, David G. (5%) Jenkins, Thomas M. (5% non-EPA) Rankin, Keegan (1% non-EPA) NERL			

Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization
S15CS0001	Work Breakdown Structure Models for Developing Unit Treatment Costs	Khera, Rajiv (40%) Speth, Thomas F. (25%) Ransom, Pat (35% non-EPA)
	Journal AWWA, 105(11):E628-E641	NRMRL
S15EP0006	Estimating the Social Cost of Non-CO2 GHG Emissions: Methane and Nitrous Oxide	Marten, Alex (75%) Newbold, Stephen C. (25%)
	Energy Policy, 51:957-972	NCEE
S15ER0010	(1) Cross-Species Conservation of Endocrine Pathways: A Critical Analysis of Tier 1 Fish and Rat Screening Assays with 12 Model Chemicals	Ankley, Gerald (34%) Jensen, Kathleen (33%) Grey, L. Earl (33%)
	Environmental Toxicology and Chemistry, 32(5):1084-1087	NHEERL
	(2) A Novel Framework for Interpretation of Data from the Fish Short-Term Reproduction Assay (FSTRA) for the Detection of Endocrine-Disrupting Chemicals	
	Environmental Toxicology and Chemistry, 33(11):2529-2540	
S15ER0014	(1) Differential Decay of Enterococci and Escherichia coli Originating from Two Fecal Pollution Sources	Korajkic, Asja (29%) McMinn, Brian R. (25%) Ashbolt, Nicholas J. (15%)
	Applied and Environmental Microbiology, 79(7):2488-2492	Shanks, Orin C. (13%) Fout, G. Shay (10%)
	(2) Biotic Interactions and Sunlight Affect Persistence of Fecal Indicator Bacteria and Microbial Source Tracking Genetic Markers in the Upper Mississippi River	Sivaganesan, Mano (7%) Harwood, Valerie J. (1% non-EPA)
	Applied and Environmental Microbiology, 80(13):3951-3961	NERL

	Nominations Recommended for a Level III Award Total of 38					
Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization				
S15ER0015	 (1) Molecular Target Sequence Similarity as a Basis for Species Extrapolation to Assess the Ecological Risks of Chemicals with Known Modes of Action Aquatic Toxicology, 144-145:141-154 	LaLone, Carlie A. (18%) Villeneuve, Daniel L. (10%) Ankley, Gerald T. (4%) Burgoon, Lyle D. (4%) Kahl, Michael D. (4%)				
	(2) Cross-Species Sensitivity to a Novel Androgen Receptor	Durhan, Elizabeth J. (4%) Makynen, Elizabeth A. (4%)				
	Agonist of Potential Environmental Concern, Spironolactone	Jensen, Kathleen M. (4%) Flynn, Kevin M. (4%)				
	Environmental Toxicology and Chemistry (ET&C), 32(11):2528-2541	Hartig, Phillip C. (4%) Russom, Christine L. (3%) Tietge, Joseph E. (3%)				
	(3) Leveraging Existing Data for Prioritization of the Ecological Risks of Human and Veterinary Pharmaceuticals to Aquatic Organisms	Norberg-King, Teresa J. (3%) Johnson, Rodney D. (3%) Berninger, Jason P. (6% non-EPA) Helgen, Henry W. (4% non-EPA)				
	Philosophical Transactions of the Royal Society B, 369(1656):20140022	(Severson) Hughes, Megan N. (3% non-EPA) Cavallin, Jenna E. (3% non-EPA) Blanksma, Chad A. (3% non-EPA) Stevens, Kyle E. (2% non-EPA) Woodard, Jonne S. (1% non-EPA)				
		NHEERL				
S15ER0019	(1) Towards Improved Models for Predicting Bioconcentration of Well-Metabolized Compounds by Rainbow Trout Using Measured Rates of In vitro Intrinsic Clearance	Nichols, John W. (20%) Fay, Kellie A. (20%) Fitzsimmons, Patrick N. (10%) Hoffman, Alex D. (10%)				
	Environmental Toxicology and Chemistry, 32(7):1611-1622	Mingoia, Robert T. (5% non-EPA) Nabb, Diane L. (5% non-EPA)				
	(2) Optimizing the Use of Rainbow Trout Hepatocytes for Bioaccumulation Assessments With Fish	Han, Xing (5% non-EPA) Segner, Helmut (5% non-EPA) Bischof (Goeritz), Ina (5% non-EPA)				
	Xenobiotica, 44(4):345-351	Arnot, Jon A. (5% non-EPA) Ferrell, Barbara D. (3% non-EPA)				
	(3) Intra-and Interlaboratory Reliability of a Cryopreserved Trout Hepatocyte Assay for the Prediction of Chemical Bioaccumulation Potential	Peterson, Heather M. (3% non-EPA) Huggett, Duane B. (2% non-EPA) Cowan-Ellsberry, Christina E. (2% non-EPA)				
	Environmental Science and Technology, 48(14):8170-8178	NHEERL				

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Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization
S15ER0020	(1) Depth Gradients in Food-web Processes Linking Habitats	Sierszen, Michael E. (25%)
	in Large Lakes: Lake Superior as an Exemplar Ecosystem	Cotter, Anne M. (25%) Hoffman, Joel C. (20%)
	Freshwater Biology, 59(10):2122-2136	Negus, Mary T. (15% non-EPA) Hrabik, Thomas R. (5% non-EPA)
	(2) Habitat and Diet Differentiation by Two Strains of	Stockwell, Jason D. (5% non-EPA)
	Rainbow Trout in Lake Superior Based on Archival Tags,	Yule, Daniel L. (5% non-EPA)
	Stable Isotopes, and Bioenergetics	
	Journal of Great Lakes Research, 39(4):578-590	NHEERL
215ED0021	(1) Developing Devicting Annual the to Charactering	Willer over Dericht (220()
S15ER0021	(1) Developing Predictive Approaches to Characterize Adaptive Responses of the Reproductive Endocrine Axis to	Villeneuve, Daniel L. (22%) Ankley, Gerald T. (8%)
	Aromatase Inhibition: I. Data Generation in a Small Fish	Bencic, David C. (8%)
	Model	Conolly, Rory B. (8%)
		Breen, Michael S. (4%)
	Toxicological Sciences, 133(2):225-233	Jensen, Kathleen M. (4%)
		Makynen, Elizabeth A. (4%)
	(2) Developing Predictive Approaches to Characterize	Breen, Miyuki (22% non-EPA)
	Adaptive Responses of the Reproductive Endocrine Axis to	Watanabe, Karen H. (4% non-EPA)
	Aromatase Inhibition: II. Computational Modeling	Lloyd, Alun L. (4% non-EPA)
	Toxicological Sciences, 133(2):234-247	Cavallin, Jenna E. (4% non-EPA) Thomas, Linnea M. (4% non-EPA)
	10x1000gical Sciences, 155(2).254-247	Wehmans, Leah C. (4% non-EPA)
		NHEERL
S15HE0023	(1) Biogeographical Analysis of Chemical Co-Occurrence Data	Tornero-velez, Rogelio (15%)
	to Identify Priorities for Mixtures Research	Starr, James M. (10%)
		Cohen Hubal, Elaine A. (5%)
	Risk Analysis/Peer Reviewed, 32(2):224-236	Egeghy, Peter P. (5%)
	(2) Environmentally Relevant Mixtures in Cumulative	Hughes, Michael F. (5%) Ross, David G. (5%)
	Assessments: an Acute Study of Toxicokinetics and Effects on	Graham, Stephen G. (5%)
	Motor Activity in Rats Exposed to a Mixture of Pyrethroids	Crofton, Kevin M. (5%)
		Setzer, Rhyne W. (5%)
	Toxicological Sciences/Peer Reviewed, 130(2):309-318	Xue, Jim (5%) Zartarian, Valerie (5%)
	(3) A Pharmacokinetic Model of Cis-and Trans-Permethrin	Scollon, Edward J. (5%)
	Disposition in Rats and Humans with Aggregate Exposure	Wolansky, Marcelo J. (5%)
	Application	Davis, Jimena (5%)
		Devito, Michael J. (5%)
	Toxicological Sciences/Peer Reviewed, 130(1):33-47	Chang, Daniel T. (5%)
		Goldsmith, Michael R. (5%)
		NERL

	Nominations Recommended for a Level III Award Total of 38				
Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization			
S15HE0024	(1) Selective Cognitive Deficits in Adult Rats after Prenatal Exposure to Inhaled EthanolNeurotoxicology and Teratology, 45:44-58	Beasley, Tracey E. (20%) Oshiro, Wendy M. (20%) McDaniel, Katherine L. (8%) Bushnell, Philip J. (5%) Evansky, Paul A. (5%)			
	(2) Toxicological Outcomes in Rats Exposed to Inhaled Ethanol During Gestation	Martin, Sheppard A. (5%) Moser, Virginia C. (4%) Norwood, Joel (4%)			
	Neurotoxicology and Teratology, 45:59-69	Copeland, Carey (4%) Degn, Laura L. (4%)			
	(3) Neurophysiological Assessment of Auditory, Peripheral Nerve, Somatosensory, and Visual System Function After Developmental Exposure to Ethanol Vapors	Freeborn, Danielle L. (4%) Gilbert, Mary E. (3%) Luebke, Robert W. (3%) Boyes, William K. (3%)			
	Neurotoxicology and Teratology, 43:1-10	Herr, David W. (3%) Rogers, John M. (2%) Hamm, Charles W. (2%) Taylor, Michele M. (1% non-EPA)			
		NHEERL			
S15HE0030	Interaction Effects of Temperature and Ozone on Lung Function and Markers of Systemic Inflammation, Coagulation, and Fibrinolysis: A Crossover Study of Healthy Young VolunteersEnvironmental Health Perspectives 123(4):310–316; DOI:10.1289/ehp.1307986	Kahle, Juliette J. (40%) Case, Martin W. (20%) Neas, Lucas M. (15%) Diaz-Sanchez, David (10%) Devlin, Robert B. (5%) Schmitt, Michael T. (5%) Madden, Michael C. (5%)			
		NHEERL			
S15HE0031	Putative Mechanisms of Environmental Chemical-Induced Steatosis	Kaiser, J. Phillip (60%) Wesselkamper, Scott C. (30%) Lipscomb, John C. (10%)			
	International Journal of Toxicology, 31(6):551-563	NCEA			

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Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization			
S15HE0033	 (1) Low Levels of Exposure to Libby Amphibole Asbestos and Localized Pleural Thickening Journal of Occupational and Environmental Medicine, 55(11):1350-5 (2) Localized Pleural Thickening: Smoking and Exposure to Libby Vermiculite Journal of Exposure Science and Environmental Epidemiology, 22(4):320-3 (3) Influence of Exposure Assessment and Parameterization on Exposure Response. Aspects of Epidemiologic Cohort Analysis Using the Libby Amphibole Asbestos Worker Cohort Journal of Exposure Science and Environmental Epidemiology, 	Kopylev, Leonid (40%) Christensen, Krista (30%) Bateson, Thomas (30%) NCEA			
S15HE0037	 25(1):12-17 (1) Improving Infant Exposure and Health Risk Estimates: Using Serum Data to Predict Polybrominated Diphenyl Ether Concentrations in Breast Milk Environmental Science and Technology, 47:4787-4795 (2) Environmental Chemicals in Breast Milk Book Chapter in Reference Module in Earth Systems and Environmental Sciences, Elsevier 2013, :1-13 	Marchitti, Satori A. (38%) Kenneke, John F. (38%) Hines, Erin P. (14%) LaKind, Judy S. (5% non-EPA) Naiman, Daniel Q. (2% non-EPA) Fenton, Suzanne E. (2% non-EPA) Berlin, Jr., Cheston M. (1%) NERL			
S15HE0042	Omega- 3 Fatty Acid Supplementation Attenuates Particulate Air Pollution Induced Cardiac Effects and Lipid Changes in Healthy Middle-Aged Adult Volunteers Environmental Health Perspectives, 120(7):952-7	Tong, Haiyan (30%) Rappold, Ana G. (25%) Samet, James M. (25%) Devlin, Robert B. (5%) Cascio, Wayne E. (5%) Diaz-Sanchez, David (5% non-EPA) Berntsen, Jon (3% non-EPA) Steck, Susan E. (2% non-EPA) NHEERL			

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Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization			
S15HS0044	 (1) A Rapid and Repeatable Method to Deposit Bioaerosols on Material Surfaces Journal of Microbiological Methods, 92(3):375-380 (2) Comparative Evaluation of Vacuum-based Surface Sampling Devices for Collection of Bacillus spores Journal of Microbiological Methods, 95(December 2013):389- 396 (3) Evaluation of Sampling Methods for Bacillus Spore- Contaminated HVAC Filters 	Calfee, Michael Worth (39%) Lee, Sang Don (24%) Ryan, Shawn P. (20%) Rose, Laura J. (5% non-EPA) Morse, Stephen (5% non-EPA) Tufts, Jenia (1% non-EPA) Clayton, Matt (1% non-EPA) Mattorano, Dino (1% non-EPA) Griffin-Gatchalian, Nicole (1% non- EPA) Touati, Abderrahmane (1% non-EPA) Slone, Christina (1% non-EPA) McSweeney, Neal (1% non-EPA)			
S15IE0047	Journal of Microbiological Methods, 96(January 2014):1-5 Sustainability Indicators for Chemical Processes: III. Biodiesel Case Study	NHSRC Ruiz-Mercado, Gerardo J. (50%) Smith, Raymond L. (25%) Gonzalez, Michael A. (25%)			
	Industrial & Engineering Chemistry Research, 52(20):6747- 6760	NRMRL			
\$15IE0049	 (1) Hybrid Vapor Stripping-Vapor Permeation Process for Recovery and Dehydration of 1-Butanol and Acetone/Butanol/Ethanol from Dilute Aqueous Solutions. Part 1. Process Simulations Journal of Chemical Technology & Biotechnology, 88(8):1436-1447 (2) Hybrid Vapor Stripping-Vapor Permeation Process for Recovery and Dehydration of 1-Butanol and Acetone/Butano/Ethanol from Dilute Aqueous Solutions. Part2. Experimental Validation with Simple Mixture and Actual Fermentation Broth Journal of Chemical Technology & Biotechnology 	Vane, Leland M. (35%) Alvarez, Franklin R. (35%) Rosenblum, Laura G. (15% non- EPA) Govindaswamy, Shekar (15% non- EPA) NRMRL			
	Journal of Chemical Technology & Biotechnology, 88(8):1448-1458				

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Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization	
S15IR0051	 (1) Near Road Modeling and Measurement of Cerium Containing Particles Generated by Nanoparticle Diesel Fuel Additive Use Environmental Science & Technology/Peer Reviewed Journal Article, 48(18):10607-10613 (2) Inhaled Diesel Emissions Generated with Cerium Oxide Nanoparticle Fuel Additive Induce Adverse Pulmonary and Systemic Effects Toxicological Sciences/Peer Reviewed Journal Article, 142(2):403-417 (3) Predicting the Effects of Nanoscale Cerium Additives in Diesel Fuel on Regional Scale Air Quality Environmental Science & Technology/Peer Reviewed Journal Article, 48(21):12775-12782 	Willis, Robert D. (4%) Bhave, Prakash V. (4%) Conner, Teri L. (4%) Fahey, Kathleen M. (4%) Gilmour, M. Ian (4%) King, Charly J. (4%) Kodavanti, Urmila P. (4%) Kovalcik, Kasey D. (4%) Krantz, Q. Todd (4%) Ledbetter, Allen D. (4%) Linak, William P. (4%) Mathur, Rohit (4%) McGee, John K. (4%) Pouliot, George A. (4%) Pye, Havala O.T. (4%) Richards, Judy E. (4%) Schladweiler, Mette C. (4%) Simon, Heather (4%) Weinstein, Jason P. (4%) Wood, Charles E. (4%) Elmore, Susan A. (4% non-EPA) Erdakos, Garnet B. (2% non-EPA) Gantt, Brett (2% non-EPA) Snow, Samantha J. (2% non-EPA) Bass, Virginia (1% non-EPA) Delgado-Saborit, Juana Maria (1% non-EPA) Harrison, Roy M. (1% non-EPA) Hoque, Shamia (1% non-EPA) Johnson, Crystal L. (1% non-EPA) Miller, Desinia B. (1% non-EPA) Nash, David G. (1% non-EPA)	
		Zhang, K. Max (1% non-EPA) NERL	
S15IR0054	(1) Quantifying the Effects of Pesticide Exposure on Annual Reproductive Success of Birds	Etterson, Matthew (50%) Bennett, Rick (50%)	
	 Integrated Environmental Assessment and Management, 9(4):590-599 (2) Selecting Surrogate Endpoints for Estimating Pesticide Effects on Avian Reproductive Success Integrated Environmental Assessment and Management, 9(4):600-609 	NHEERL	

	Nominations Recommended for a Level III Award Total of 38		
Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization	
S15MM0055	 (1) Field-Based Approach for Assessing the Impacts of Treated Pulp and Paper Mill Effluent on Endogenous Metabolites of Fathead Minnows (Pimephales promelas) Environmental Science and Technology, 47:10628-10636 (2) Biological Effects-Based Tools for Monitoring Impacted Surface Waters in the Great Lakes: A Multiagency Program in Support of the Great Lakes Restoration Initiative Environmental Practice, 15(4):409-426 (3) An Inexpensive, Temporally Integrated System for Monitoring Occurrence and Biological Effects of Aquatic Contaminants in the Field Environmental Toxicology and Chemistry, 33(7):1584-1595 	Kahl, Michael D. (8%) Ekman, Drew (6%) Ankley, Gerald (5%) Collette, Tim (5%) Smith, Edwin (5%) Teng, Quincy (5%) Tietge, Joseph (5%) Villeneuve, Dan (5%) Durhan, Elizabeth (4%) Jensen, Kathleen (4%) Makynen, Elizabeth (4%) Miller, David (4%) Davis, John (8%) Berninger, Jason (2%) Blazer, Vicki (2%) Cavallin, Jenna (2%) Eid, Evan (2%) Garcia-Reyero, Natalia (2%) Holmen, Bruce (2%) Hughes, Megan (2%) Iwanowicz, Luke (2%) Jorgenson, Zachary (2%) LaLone, Carlie (2%) Lee, Kathy (2%) Mayasich, Joseph (2%) Mazik, Pat (2%) Schroeder, Anthony (2%) Stevens, Kyle (2%)	
S15MM0059	 (1) Development of an Integrated Assessment of Great Lakes Using Towed In situ Sensor Technologies: Linking Nearshore Conditions with Adjacent Watersheds Aquatic Ecosystem Health and Management, 16(3):248-266 (2) Water Quality and Plankton in the United States Nearshore Waters of Lake Huron Environmental Management, 50(4):664-678 (3) Lake Ontario: Nearshore Conditions and Variability in Water Quality Parameters Journal of Great Lakes Research, 38(4):133-145 	Kelly, John R. (35%) Yurista, Peder M. (35%) Miller, Samuel E. (20%) Van Alstine, Jon D. (10% non-EPA) NHEERL	

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S15MM0060	The Mass Spectrometric Ortho Effect Studied for All 209 PCB Congeners	Osemwengie, Lantis I. 60(%) Sovocool, G. Wayne (40%)
	International Journal of Mass Spectrometry, 352:51-64	NERL
S15MM0061	A Rapid Miniaturized Residue Analytical Method for the Determination of Zoxamide and Its Two Acid Metabolites in Ginseng Roots Using UPLC-MS/MS Journal of Agricultural and Food Chemistry, 62(17):3702-3709	Podhorniak, Lynda V. (100%) ESC
S15MM0064	Habitat and Hydrology Condition Indices for the Upper Mississippi, Missouri, and Ohio Rivers Ecological Indicators, 29:111-124	Taylor, Debra L. (55%) Bolgrien, David W. (15%) Hill, Brian H. (15%) Pearson, Mark S. (10%) Angradi, Ted R. (5%) NHEERL
S15OR0068	 (1) Derivation of a Benchmark for Freshwater Ionic Strength Environmental Toxicology and Chemistry, 32(2):263-271 (2) Assessing Causation of the Extirpation of Stream Macroinvertebrates by a Mixture of Ions Environmental Toxicology and Chemistry, 32(2):277-287 (3) Relationship of Land Use and Elevated Ionic Strength in Appalachian Watersheds Environmental Toxicology and Chemistry, 32(2):296-303 	Cormier, Susan Marie (35%) Suter, II, Glenn Walter (25%) Pond, Gregory J. (10%) Zheng, Lei (20% non-EPA) Wilkes, Sam (10% non-EPA) NCEA
S15OR0071	Nutrient Dynamics in Flooded Wetlands: I. Model Development Journal, 18(12):1724-1738	Hantush, Mohamed M. (55%) Kalin, Latif (20% non-EPA) Isik, Sabahattin (15% non-EPA) Yucekaya, Ahmet (10% non-EPA)
		NRMRL
S15OR0072	Nonparametric Bayesian Methods for Benchmark Dose Estimation Risk Analysis, 33(9):1608-19	Spassova, Maria A. (18%) Kopylev, Leonid (16%) White, Paul D. (15%) Fox, John (15%) Roy, Anindya (18% non-EPA) Guha, Nilabja (18% non-EPA)
		NCEA

Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization
S15RM0085	Hyporheic Flow Patterns in Relation to Large River Floodplain AttributesJournal of Hydrology/print, and online via ScienceDirect doi: 10.1016/jhydrol.2012.04.039, 448-449:161-173	Faulkner, Barton R. (55%) Brooks, J. Renée (15%) Forshay, Kenneth J. (15%) Cline, Steven P. (15%) NRMRL
S15RM0088	A Direct Sensitivity Approach to Predict Hourly Ozone Resulting from Compliance with the National Ambient Air Quality Standard Environmental Science & Technology, 47(5):2304-2313	Simon, Heather (40%) Baker, Kirk (15%) Napelenok, Sergey (15%) Possiel, Norm (5%) Wells, Benjamin (5%) Timin, Brian (5%) Akhtar, Farhan (15% non-EPA) OAQPS
S15SI0094	Phenotypic Screening of the ToxCast Chemical Library to Classify Toxic and Therapeutic Mechanisms Nature Biotechnology, 32(6):583-591	Houck, Keith A. (25%) Knudsen, Thomas B. (5%) Martin, Matthew T. (5%) Reif, David M. (5%) Judson, Richard S. (5%) Kavlock, Robert J. (3%) Richard, Ann M. (2%) Dix, David J. (1%) Kleinstreuer, Nicole C. (24% non- EPA) Berg, Ellen (20% non-EPA) Polokoff, Mark (3% non-EPA) Yang, Jian (2% non-EPA)
S15SI0095	Profiling 976 ToxCast Chemicals across 331 Enzymatic and Receptor Signaling Assays Chemical Research in Toxicology, 26:878-895	Sipes, Nisha S. (30%) Knudsen, Thomas B. (15%) Martin, Matthew T. (10%) Judson, Richard S. (10%) Houck, Keith A. (10%) Reif, David M. (5%) Richard, Ann M. (5%) Kavlock, Robert J. (5%) Dix, David J. (1%) Kothiya, Parth (9% non-EPA) NCCT

	Nominations Recommended for a Level III Award Total of 38		
Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization	
S15SI0097	 (1) Evaluation of Multi-well Microelectrode Arrays for Neurotoxicity Screening Using a Chemical Training Set Neurotoxicology, 33:1048-57 (2) Burst and Principal Components Analysis of MEA Data Separates Chemicals by Class Neurotoxicology, 40:75-85 (3) Multi-well Microelectrode Array Recordings Detect Neurotoxicity of ToxCast Compounds Acting via Multiple Toxicity Pathways Neurotoxicology, 44:204-17 	Shafer, Timothy J. (20%) LeFew, William R. (15%) Mack, Cina M. (10%) Martin, Matthew T. (10%) Johnstone, Andrew FM (5%) Houck, Keith (5%) Burgoon, Lyle D. (5%) McConnell, Emma R. (10% non- EPA) Valdivia, Pablo (10% non-EPA) McClain, Maxine (3% non-EPA) Lin, Bryant (3% non-EPA) Ross, James (2% non-EPA) Turner, James (2% non-EPA) NHEERL	
S15SI0103	High Throughput Heuristics for Prioritizing Human Exposure to Environmental Chemicals Environmental Science and Technology, 48:12760-12767	Wambaugh, John F. (23%) Setzer, R. Woodrow (23%) Dionisio, Kathie L. (7%) Egeghy, Peter (7%) Judson, Richard S. (7%) Wang, Anran (23% non-EPA) Frame, Alicia (10% non-EPA) NCCT	
\$15TF0106	 (1) Processes of Ammonia Air-Surface Exchange in a Fertilized Zea mays Canopy Print and electronic Biogeosciences, 10:981-998 (2) Linking Agricultural Management and Air-Quality models for Regional to National-Scale Nitrogen Deposition Assessments Print and electronic Biogeosciences, 9:4023-4035 (3) Evaluation of a Regional Air-Quality Model with Bi- directional NH3 Exchange Coupled to an Agro-ecosystem Model 	Bash, Jesse O. (19%) Cooter, Ellen J. (14%) Walker, John T. (14%) Pleim, Jonathan E. (5%) Schwede, Donna (5%) Herrick, Jeffry D. (5%) Dennis, Robin L. (5%) Jones, Matthew (5% non-EPA) Nemitz, Eiko (5% non-EPA) Meyers, Tilden (5% non-EPA) Myles, LaToya (5% non-EPA) Benson, Verel (5% non-EPA) Ran, Limei (4% non-EPA) Robarge, Wayne P. (4% non-EPA)	
	Print and electronic Biogeosciences, 10:1635-1645	NERL	

Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization
S15TF0109	 (1) Characterizing Mercury Concentrations and Fluxes in a Coastal Plain Watershed: Insights From Dynamic Modeling and Data Journal of Geophysical Research, Vol. 117, Issue G1; doi:10.1029/2011JG001806, 2012 (2) Climate Change and Watershed Mercury Export: A Multiple Projection and Model Analysis Environmental Toxicology and Chemistry, 32(9):2165-2174 (3) Mercury and Methylmercury Stream Concentrations in a Coastal Plain Watershed: A Multi-scale Simulation Analysis 	Golden, Heather E. (35%) Knightes, Christopher D. (35%) Bradley, Paul M. (10% non-EPA) Conrads, Paul A. (5% non-EPA) Feaster, Toby D. (5% non-EPA) Journey, Celeste A. (2% non-EPA) Benedict, Stephen D. (2% non-EPA) Marvin-DiPasquale, Mark (2% non- EPA) Brigham, Mark (2% non-EPA) Davis, Gary M. (2% non-EPA) NERL
	Environmental Pollution, 187:182-192	
S15TF0117	 (1) Examining the Impact of Heterogeneous Nitryl Chloride Production on Air Quality across the United States Atmospheric Chemistry & Physics, 12:6455-6473 (2) Importance of Tropospheric CINO2 Chemistry across the Northern Hemisphere 	Sarwar, Golam (50%) Simon, Heather (30%) Mathur, Rohit (5%) Bhave, Prakash (5%) Xing, Jia (5% non-EPA) Yarwood, Greg (5% non-EPA) NERL
	Geophysical Research Letters, 41(11):4050-4058	
S15TF0119	WRF-CMAQ Two-way Coupled System with Aerosol Feedback: Software Development and Preliminary Results Geoscientific Model Development, 5(2):299-312	Wong, Cheung (David) (35%) Pleim, Jonathan (15%) Mathur, Rohit (15%) Spero (Otte), Tanya (5%) Gilliam, Robert (5%) Pouliot, George (5%) Young, Jeffrey O. (5%) Binkowski, Francis (5% non-EPA) Xiu, Aijun (5% non-EPA) Kang, Daiwen (5% non-EPA)
		NERL

Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization
S15EP0004	(1) A Hedonic Analysis of the Impact of LUST Sites on House Prices	Guignet, Dennis (83%) Zabel, Jeffrey E. (17% non-EPA)
	Resource and Energy Economics, 34(4):549-564	NCEE
	(2) What Do Property Values Really Tell Us? A Hedonic Study of Pollution from Underground Storage Tanks	
	Land Economics, 89(2):211-226	
	(3) The Impacts of Pollution and Exposure Pathways on Home Values: A Stated Preference Analysis	
	Ecological Economics, 82:53-63	
S15EP0007	Examining the Health-Risk Tradeoffs of Mandatory Bicycle Helmet Laws	Newbold, Stephen C. (100%) NCEE
	Risk Analysis, 32(5):791-798	NCEE
S15ER0012	 (1) Metabolomics for in Situ Environmental Monitoring of Surface Waters Impacted by Contaminants from Both Point and Nonpoint Sources Environmental Science and Technology, 48(4):2395-2403 	Skelton, David M. (15%) Collette, Timothy W. (12%) Villeneuve, Daniel L. (11%) Ankley, Gerald T. (10%) Ekman, Drew R. (7%)
	(2) Using Transcriptomic Tools to Evaluate Biological Effects Across Effluent Gradients at a Diverse Set of Study Sites in Minnesota, USA	Teng, Quincy (5%) Berninger, Jason (15% non-EPA) Martinovic-Weigelt, Dalma (10% non-EPA)
	Environmental Science and Technology, 48(4):2404-2412	Garcia-Reyero, Natalia (6% non- EPA) Perkins, Edward J. (5% non-EPA) Escalon, Lynn (4% non-EPA)
		NERL
S15ER0013	 (1) Using delta-15-N in Fish Larvae as an Indicator of Watershed Sources of Anthropogenic Nitrogen: Response at Multiple Spatial Scales 	Hoffman, Joel C. (35%) Peterson, Gregory S. (22%) Cotter, Anne M. (22%) Signstan Michael F. (11%)
	Estuaries and Coasts, 35(6):1453-1467	Sierszen, Michael E. (11%) Kelly, John R. (5%) Starry, Matthew A. (5% non-EPA)
	(2) Landscape-Scale Food Webs of Fish Nursery Habitat Along a River-Coast Mixing Zone	NHEERL
	Estuaries and Coasts, 38(4):1335-1349	

Nominations Recommended for Honorable Mention (No Monetar		tary Award) Total of 42
Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization
S15ER0018	 (1) Carbon Sequestration in Wetland Soils of the Northern Gulf of Mexico Coastal Region Wetlands Ecology and Management, 22(3):289-303 	Nestlerode, Janet (48%) Hansen, Virginia (48%) Harwell, Matthew (2%) Teague, Aarin (2% non-EPA)
	(2) Application of a Three-Tier Framework to Assess Ecological Condition of Gulf of Mexico Coastal WetlandsEnvironmental Monitoring and Assessment, 186(6):3477-3493	NHEERL
S15ER0022	Comparison of Methods for Quantifying Reef Ecosystem Services: A Case Study Mapping Services for St. Croix, USVI Ecosystem Services, 8:1-15	Yee, Susan (75%) Oliver, Leah (10%) Dittmar, John (15% non-EPA) NHEERL
S15HE0026	Mode of Action Framework Analysis For Receptor-Mediated Toxicity: The Peroxisome Proliferator-Activated Receptor Alpha (Ppara) as a Case Study Critical Reviews in Toxicology, 44(1):1-49	Corton, Chris (50%) Lau, Christopher (5%) Seed, Jennifer (5%) Klaunig, James (10% non-EPA) Cunningham, Michael (5% non-EPA) Hummer, Timothy (5% non-EPA) Meek, Bette (5% non-EPA) Peters, Jeffrey M. (5% non-EPA) Popp, James A. (5% non-EPA) Rhomberg, Lorenz (5% non-EPA) NHEERL
S15HE0027	 (1) An Animal Model Of Marginal Iodine Deficiency During Development: The Thyroid Axis And Neurodevelopmental Outcome Toxicological Sciences, 132(1):177-195 (2) Evaluation of Iodide Deficiency In The Lactating Rat and Pup Using A Biologically Based Dose-Response Model Toxicological Sciences, 132(1):75-86 	Gilbert, Mary E. (30%) Hedge, Joan M. (20%) Crofton, Kevin M. (5%) Tietge, Joseph (4%) McLanahan, Eva (4%) Fisher, Jeffrey (15% non-EPA) Valentin-Blasini, Liza (5% non-EPA) Blount, Benjamin (5% non-EPA) Zoeller, R. Thomas (4% non-EPA) Lumen, Annie (2% non-EPA) Jarrett, Jeffery (2% non-EPA) Kannan, Kurunthachalam (2% non- EPA) Shuang, Li (2% non-EPA) NHEERL

Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization
S15HE0029	 (1) A Four-Step Approach To Evaluate Mixtures For Consistency With Dose Addition Toxicology, 313(2-3):134-144 (2) Cholinesterase Inhibition And Depression Of The Photic After Discharge Of Flash Evoked Potentials Following Acute or Repeated Exposures To A Mixture of Carbaryl and Propoxur Neurotoxicology, 33(3):332-346 (3) Impact Of Chemical Proportions On The Acute 	Herr, David W. (17%) Moser, Virginia C. (17%) Simmons, Jane Ellen (8%) Lyke, Danielle F. (8%) Padilla, Stephanie (2%) Swank, Adam E. (2%) MacMillan, Denise K. (2%) Hertzbertg, Richard C. (16% non- EPA) Haber, Lynne T. (8% non-EPA) Li, Ruosha (4% non-EPA) Pan, Yi (4% non-EPA) Lyles, Robert H. (4% non-EPA)
	Neurotoxicity Of A Mixture Of Seven Carbamates In Preweanling And Adult Rats Toxicological Sciences, 129(1):126-134	Jean-Claude, Mwanza (3% non-EPA) Korman-Vincent, Melissa (3% non- EPA) Zehr, R. Dan (2% non-EPA) NHEERL
S15HE0039	Elevated Blood Pressure in Offspring of Rats Exposed to Diverse Chemicals During Pregnancy Toxicological Sciences, 137(2):436-446	Rogers, John M. (25%) Grey, Brian E. (20%) Norwood, Jr., Joel (15%) Hutchings, Robert Ellis (10%) Zucker, Robert M. (10%) Lau, Christopher (10%) Grace, Curtis E. (5%) Gordon, Christopher J. (5%) NHEERL
S15HE0040	Application of an Updated Physiologically-Based Pharmacokinetic Model for Chloroform to Evaluate CYP2E1- Mediated Renal Toxicity in Rats and Mice Toxicological Sciences, 131(2):360-374	Sasso, Alan F. (25%) Schlosser, Paul M. (17%) Lipscomb, John C. (17%) Li, Zheng (Jenny) (8%) Rieth, Susan (3%) Kedderis, Gregory L. (10% non-EPA) Genter, Mary Beth (10% non-EPA) Snawder, John (10% non-EPA) NCEA

Nominat	Nominations Recommended for Honorable Mention (No Monetary Award) Total of 42		
Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization	
S15HE0043	 Public Health Benefits of Reducing Air Pollution in Shanghai: A Proof-of-Concept Methodology With Application to BenMap Science of the Total Environment, 2014 Jul 1;485-486:396- 405. doi: 10.1016/j.scitotenv.2014.03.113. 	Voorhees, A. Scott (70%) Wang, Jiandong (10% non-EPA) Wang, Cuicul (5% non-EPA) Wang, Shuxiao (5% non-EPA) Zhao, Bin (5% non-EPA) Kan, Haidong (5% non-EPA) OAR	
S15HS0046	Investigation of the Persistence of Nerve Agent Degradation Analytes on Surfaces through Wipe Sampling and Detection with Ultrahigh Performance Liquid Chromatography-Tandem Mass SpectrometryAnalytical Chemistry, 87(2):1034-1041	Willison, Stuart (100%) NHSRC	
S15IE0048	 (1) Beet Juice Utilization : Expeditious Green Synthesis of Nobel Metal Nanoparticles (Ag, Au, Pt, and Pd) Using Microwaves RSC Advances, 2:10283-10290 (2) Beet Juice-induced Green Fabrication of Plasmonic AgCl/Ag Nanoparticles ChemSusChem, 5:2435-2441 (3) Expeditious Organic-free Assembly: Morphologically Controlled Synthesis of Iron Oxides using Microwaves Nanoscale, 5:8675-8679 	Varma, Rajender S. (50%) Kou, Jiahui (50% non-EPA) NRMRL	
S15IE0050 (1) Phosphate removal using m adsorption media Environmental Science: Water 107 (2) Suppressing NOM access to particles enhances the decomporcentaminants Catalysis Communications, 41:	 Environmental Science: Water Research & Technology, 1:96-107 (2) Suppressing NOM access to controlled porous TiO2 particles enhances the decomposition of target water contaminants Catalysis Communications, 41:79-82 (3) Silver-based antibacterial surfaces for drinking water 	Nadagouda, Mallikarjuna (43%) Varma, Rajender S. (7%) Choi, Hyeok (7%) Speth, Thomas F. (6%) Garland, Jay (6%) Han, Changseok (4%) Lalley, Jacob (4%) Zakersalehi, Abolfazl (7% non-EPA) Dionysiou, Dionysios D. (4% non- EPA) Mohan, Gayathri Ram (4% non-EPA) Shankara, Somashetty (4% non-EPA) Yang, Duck J. (4% non-EPA)	
	Current Opinion in Chemical Engineering, 3:25-29	NRMRL	

Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization
S15IR0052	 (1) EPA's SHEDS-multimedia Model: Children's Cumulative Pyrethroid Exposure Estimates and Evaluation Against NHANES Biomarker Data Environmental International, 73:304-311 (2) Analysis of NHANES Measured Blood PCB's in the General Population and Application of SHEDS Model to Identify Key Exposure Factors Journal of Exposure Science & Environmental Epidemiology, 24:615-621 	Xue, Jianping (35%) Zartarian, Valerie (30%) Tornero-Velez, Rogelio (10%) Tulve, Nicolle (10%) Liu, Shi (5%) Geller, Andrew (5%) Schultz, Bradley (5%) NERL
S15IR0053	Landscape and Regional Context Differentially Affect Nest Parasitism and Nest Predation for Wood Thrush in Central Virginia, USA Ornithological Applications, 116(2):205-214	Etterson, Matthew (60%) Hollenhorst, Tom (20%) Greenberg, Russell (20% non-EPA) NHEERL
S15MM0056	Evaluation of a Fluidized Bed Asbestos Segregator Preparation Method for the Analysis of Low-Levels of Asbestos in Soil and Other Solid Media Analytical Methods: Royal Society of Chemistry/online and print, 7(5):1658-1668	Januch, Jed (25%) Berry, David (25%) Woodbury, Lynn (25% non-EPA) Brattin, William (25% non-EPA) Region 9
S15MM0057	 (1) Lake Shore and Littoral Habitat Structure: A Field Survey Method and its Precision Lake and Reservoir Management, 30(2):157-176 (2) Relevance of Lake Physical Habitat Assessment Indices to Fish and Riparian Birds Lake and Reservoir Management, 30(2):177-191 (3) Lakeshore and Littoral Physical Habitat Structure in a National Lakes Assessment Lake and Reservoir Management, 30(2):192-215 	Kaufmann, Philip R. (65%) Paulsen, Steven G. (6%) Peck, David V. (3%) Van Sickle, John (2%) Hughes, Robert M. (11% non-EPA) Whittier, Thomas R. (4% non-EPA) Seeliger, Curt W. (4% non-EPA) Bryce, Sandra A. (3% non-EPA) Kamman, Neil C. (2% non-EPA) NHEERL
S15MM0062	Development of Rapid Canine Fecal Source Identification PCR-based Assays Environ. Sci. Technol. 48 (19):11453–11461; DOI: 10.1021/es502637b	Shanks, Orin C. (40%) White, Karen (30%) Kelty, Catherine (20%) Green, Hyatt (10% non-EPA) NRMRL

Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization
S15MM0065	Investigation of an Association Between Childhood Leukemia Incidences and Airports in Texas Atmospheric Pollution Research 5 (2014) 189-195, 5(2):189- 195	Senkayi, Sala N. (70%) Sattler, Melanie (10% non-EPA) Rowe, Nancy (10% non-EPA) Chen, Victoria C.P. (10% non-EPA) Region 6
S15OR0069	Place-Based Stressors Associated with Industry and Air Health & Place, 28 (2014):31-37	Gross-Davis, Carol Ann (40%) Davis, Lauren O. (10%) Kondo, Michelle (40%) May, Katlyn (3% non-EPA) Johnson, Tyiesha (3% non-EPA) Gabbadon, Alice (1% non-EPA) Sherrod, Claudia (1% non-EPA) Mallard, Mable (1% non-EPA) Branas , Charles C. (1% non-EPA) Region 3
S15OR0070	MetaPath: An Electronic Knowledge Base for Collating, Exchanging and Analyzing Case Studies of Xenobiotic Metabolism Regulatory Toxicology and Pharmacology, 63:84-96	Kolanczyk, Richard C. (30%) Schmieder, Patricia K. (30%) Jones, William J. (15%) Mekenyan, Ovanes G. (10% non- EPA) Veith, Gilman (5% non-EPA) Chapkanov, Atanas (3% non-EPA) Temelkov, Stanislav (3% non-EPA) Kotov, Stefan (1% non-EPA) Velikova, Maria (1% non-EPA) Vasilev, Krasimir (1% non-EPA) NHEERL

Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization
S15RA0076	A Synthesis of the Ecological Effects of Air Pollution from Nitrogen and Sulfur in the United States Frontiers in Ecology and the Environment, 10(7):365-372	Greaver, Tara (27%) Herrick, Jeffrey D. (12%) Lynch, Jason (6%) Dennis, Robin (6%) Novak, Kris (5%) Dubois, Jean-Jacques (5%) Sullivan, Tim (12% non-EPA) Baron, Jill (6% non-EPA) Barber, Mary (3% non-EPA) Cosby, Jack (3% non-EPA) Deerhake, Marion (3% non-EPA) Goodale, Christine (3% non-EPA) Herlily, Alan (3% non-EPA) Lawrence, Greg (3% non-EPA) Liu, Lingli (3% non-EPA)
S15RA0077	Methylmercury-induced Inhibition of Paraoxonase-1 (PON1)- Implications for Cardiovascular Risk J. Toxicol. Environ. Health A. 77(17):1004-23. doi: 10.1080/15287394.2014.919837	Nath, Raghu G. (30%) Sonawane, Babasaheb R. (20%) Ginsberg, Gary (40% non-EPA) Lewandowski, Paul (10% non-EPA) NCEA
S15RA0082	 Evaluating Potential Response-Modifying Factors for Associations between Ozone and Health Outcomes: A Weight- of-Evidence Approach Environmental Health Perspectives 122(11):1166-1176 	Vinikoor-Imler, Lisa C. (36%) Sacks, Jason D. (30%) Owens, Elizabeth O. (22%) Ross, Mary (5%) Brown, James S. (5%) Nichols, Jennifer L. (2% non-EPA) NCEA
S15RM0084	 (1) Development of Aquatic Toxicity Benchmarks for Oil Products Using Species Sensitivity Distributions Integrated Environmental Assessment and Management, 8(4):610-615 (2) Ecological Impacts of the Deepwater Horizon Oil Spill: Implications for Immuntoxicity Toxicologic Pathology, 40:315-320 	Barron, Mace G. (85%) Jackson, Crystal R. (10%) Hemmer, Michael J. (5%) NHEERL

Nominations Recommended for Honorable Mention (No Monetary Award) Total of 42			
Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization	
S15RM0086	Satellite Remote Sensing of Chlorophyll a in Support of Nutrient Management in the Neuse and Tar-Pamlico River (North Carolina) Estuaries Remote Sensing of Environment, 153:61-78	Keith, Darryl J. (100%) NHEERL	
S15RM0087	Residential Demolition and its Impact on Vacant Lot Hydrology: Implications for the Management of Stormwater and Sewer System Overflows Landscape and Urban Planning, 128:48-56	Shuster, William (70%) Dadio, Stephen (9% non-EPA) Drohan, Patrick (7% non-EPA) Losco, Russell (7% non-EPA) Shaffer, Jared (7% non-EPA) NRMRL	
S15RM0089	Hydrological Impacts of Mesquite Encroachment in the Upper San Pedro Watershed Journal of Arid Environment, 82(1):147-155	Yuan, Yongping (30%) Kepner, William (20%) Erickson, Caroline (10%) Jackson, Michael (5%) Nie, Wenming (35% non-EPA) NERL	
S15RM0090	Urbanization Impacts on Flooding in the Kansas River Basin and Evaluation of Wetlands as a Mitigation Measure Transactions of the American Society of Agricultural and Biological Engineers, 55(3):849-859	Yuan, Yongping (35%) Lopez, Ricardo D. (25%) Qaiser, Kamal (40% non-EPA) NERL	
S15SI0093	 (1) Effect of Acid and Alcohol Network Forces within Functionalized Multiwall Carbon Nanotubes Bundles on Adsorption of Copper (II) Species Chemosphere, 90 (2013):395-402 (2) Effect of Chloride Ions and Water Chemistry on Copper (II) Adsorption on Functionalized and Pristine Carbon Nanotubes Compared to Activated Carbon F-400 Water Air Soil Pollution, 225:1913-1917 (3) Optimizing the Physical-Chemical Properties of Carbon Nanotubes (CNT) and Graphene Nanoplatelets (GNP) on Cu (II) Adsorption J. Hazardous Materials, 279:410-417 	Sahle-Demessie, Endalkachew (51%) Rosenzwig, Shirley (24% non-EPA) Sorial, George (11% non-EPA) McAvoy, Drew C. (7% non-EPA) Hassan, Ashraf Aly (4% non-EPA) Mack, James (3% non-EPA) NRMRL	

Nom.	Titles and Citations of Submitted Papers	EPA Authors and Nominating Organization
S15SI0098	(1) Catchment-scale Hydrologic Implications of Parcel-level Stormwater Management (Ohio USA), 2012 Shuster W., Rhea L,; J. Hydrol., http://dx.doi.or/10.1016/j.hydrol.2012.1.043	Shuster, William (50%) Garmestani, Ahjond (25%) Rhea, Lee (25%)
	Journal of Hydrology 485 (2013): 177-187.	NRMRL
	(2) Exchange of Capitals in Water Resources Management- an Approach to Sustainability? 2014. Shuster WD, Garmestani AS.	
	Invited paper. Clean Techn Environ Policy DOI: 10.1007/s10098-014-0886-5	
S15SI0101	Immediate and long-term consequences of vascular toxicity during zebrafish development	Tal, Tamara (15%) Harris, Peggy (10%) Olin, Jaanana (10%)
	Reproductive Toxicology, 48:51-61	Olin, Jeanene (10%) Knudsen, Thomas (10%) Hemmer, Michael (10%) Kleinstreuer, Nicole (10%) Wood, Charles (5%) Padilla, Stephanie (5%) McCollum, Catherine (10% non- EPA) Bondesson, Maria (5% non-EPA) Hans, Charu (5% non-EPA) Merchant, Fatima (3% non-EPA) Shah, Shishir (2% non-EPA)
		NHEERL
S15SI0104	Developing scientific information to support decisions for sustainable coral reef ecosystem services Ecological Economics 115: 39–50; doi:10.1016/j.ecolecon.2014.02.016	Yee, Susan (25%) Bradley, Patricia (22%) Fisher, William (22%) Carriger, John (22%) Dyson, Brian (9%)
		NHEERL
S15TF0105	 (1) Travel Distance and Transformation of Injected Emulsified Zero Valent Iron Nanoparticles in the Subsurface during Two and Half Years Water Research, 47:4095-4106 	Su, Chunming (70%) Watling, Mark (10% non-EPA) Puls, Bob (5% non-EPA) Krug, Tom (5% non-EPA) O'Hara, Suzanne (5% non-EPA)
		Quinn, Jacqueline (2.5% non-EPA) Ruiz, Nancy (2.5% non-EPA)
	(2) A Two and Half-year-performance Evaluation of a Field Test on Treatment of Source Zone Tetrachloroethene and its Chlorinated Daughter Products Using Emulsified Zero Valent Iron Nanoparticles	NRMRL
	Water Research, 46:5071-5084	

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S15TF0107	Controls on Gas Transfer Velocities in a Large River Journal of Geophysical Research, Biogeosciences, Vol. 117, Issue G2; doi:10.1029/2011JG001794	Beaulieu, Jake J. (80%) Shuster, William D. (19%) Rebholz, Jacob A. (1% non-EPA) NRMRL
S15TF0108	Air Emissions from Organic Soil Burning on the Coastal Plain of North Carolina Atmospheric Environment/online and traditional, 64(1):192- 199	Geron, Christopher D. (80%) Hayes, Michael D. (20%) NRMRL
S15TF0110	 (1) Air Quality Modeling in Support of the Near-Road Exposures and Effects of Urban Air Pollutants Study (NEXUS) International Journal of Environmental Research and Public Health, :8777-8793 (2) A Method for Estimating Urban Background Concentrations in Support of Hybrid Air Pollution Modeling for Environmental Health Studies International Journal of Environmental Research and Public Health, :10518-10536 (3) Creating Locally-Resolved Mobile-Source Emissions Inputs for Air Quality Modeling in Support of an Exposure Study in Detroit, Michigan, USA International Journal of Environmental Research and Public Health, 11(12):12739-12766 	Isakov, Vlad (15%) Snyder, Michelle (10%) Burke, Janet (10%) Cook, Richard (10%) Garcia, Valerie (10%) Heist, David (10%) Perry, Steven (5%) Vette, Alan (5%) Dionisio, Kathie (5%) Bereznicki, Sarah (1%) Arunachalam, Saravanan (10% non- EPA) Hanna, Adel (1% non-EPA) Naess, Brian (1% non-EPA) Serre, Marc (1% non-EPA) Serre, Marc (1% non-EPA) Valencia, Alejandro (1% non-EPA) Omary, Mohammad (1% non-EPA) Akita, Yasuyuki (1% non-EPA) Batterman, Stuart (1% non-EPA)
S15TF0111	 (1) A Regional Assessment of Marine Vessel PM2.5 Impacts in the U.S. Pacific Northwest Using a Receptor-Based Source Apportionment Method Atmospheric Environment, 68:103-111 (2) The Effects of Marine Vessel Fuel Sulfur Regulations on Ambient PM2.5 Along the West Coast of the U.S. Atmospheric Environment, 103:121-128 	Kotchenruther, Robert A. (100%) Region 10
S15TF0116	Air Pollution Retention within a Complex of Urban Street Canyons: A Two- City Comparison Atmospheric Environment, 49:24-32	Richmond-Bryant, Jennifer (60%) Reff, Adam (40%) NCEA

Nominations Recommended for Honorable Mention (No Monetary Award) Total of 42			
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S15TF0120	Photoreactivity of Unfunctionalized Single-Wall Carbon Nanotubes Involving Hydroxyl Radical: Chiral Dependency and Surface Coating Effect	Zepp, Richard G. (50%) Hou, Wen-Che (30% non-EPA) Jafvert, Chad T. (10% non-EPA) Beigzadehmilani, Somayeh (10%	
	Environmental Science & Technology, 48(8):3875-3882	non-EPA) NERL	

Key to Acronyms used in the above Tables

ESC – Environmental Science Center, Fort Meade, MD NCCT – Office of Research and Development (ORD) National Center for Computational Toxicology NCEA – ORD National Center for Environmental Assessment NCEE – National Center for Environmental Economics NEIC – National Enforcement Investigations Center NERL – ORD National Exposure Research Laboratory NHEERL – ORD National Health and Environmental Effects Laboratory NHSRC – National Homeland Security Research Center NRMRL – ORD National Risk Management Research Laboratory OAQPS – Office of Air Quality Planning & Standards OAR – Office of Air and Radiation **OPP** – Office of Pesticide Programs OST – Office of Water, Office of Science and Technology *Region 3 – Region 3 EPA Office Region* 6 – *Region* 6 EPA Office Region 9 – Region 9 EPA Office Region 10 – Region 10 EPA Office