



Government Relations
1828 L Street NW, Suite 810
Washington, DC
20036-5104 U.S.A.

tel 1.202.785.3756
fax 1.202.429.9417
www.asme.org

**Position Statement on the Fiscal Year 2016 Budget Request for the
Environmental Protection Agency (EPA) Science and Technology (S&T) Programs**

**Submitted by the ASME EPA Task Force of the ASME Environmental Engineering Division
to the Senate Appropriations Subcommittee on Interior, Environment and Related Agencies**

April 30, 2015

Mr. Chairman, Ranking Members, and Members of the Subcommittee:

The ASME Environmental Protection Agency (EPA) Task Force (Task Force) is pleased to provide this testimony on the Fiscal Year 2016 (FY16) budget request for EPA S&T programs.

Introduction

ASME is a nonprofit, worldwide mechanical engineering professional society with more than 130,000 members. It conducts one of the world's largest technical publishing operations, holds more than 30 technical conferences and 200 professional development courses each year, and has authored over 600 industrial and manufacturing standards.

Background

U.S. scientists and engineers have a long-standing professional interest in applying Science & Technology (S&T) to improve the environment and human health. Mechanical engineers increasingly collaborate with other professionals to develop innovative and cost-effective environmental technologies and systems.

The EPA's Office of Research and Development (ORD) is an essential part of the nation's efforts to protect human health and safeguard the environment in a scientifically sound and sustainable manner. ORD's efforts improve environmental health, provide innovative environmental monitoring techniques, and support environmental technology development and implementation.

Overview of the ASME EPA Task Force Review

The FY16 budget request for EPA is \$8.5 billion, a \$452 million or 5.5 percent increase from the \$8.1 billion enacted in FY15. The EPA's ORD Science and Technology (S&T) accounts would increase by \$34.4 million to \$769 million, a 4.6 percent increase.

Key research areas for mechanical engineering within the S&T portfolio include the Air, Climate, and Energy area, the Safe and Sustainable Water Resources research program area, and research at the National Risk Management Research Laboratory. Air, Climate, and Energy would increase by \$8.4 million (9.1 percent) to \$100.3 million, and Safe and Sustainable Water Resources would increase by 3.4 million (3.3 percent) to \$111 million. Chemical Safety and Sustainability would see the largest increase at 13.8 million (10.8 percent) to \$140.7 million. Funding for the National

Risk Management Research Laboratory would be reduced slightly from \$71 million to \$70.6 million.

EPA has seen declining budget figures for the last several budget cycles. Funding proposed for FY2016 is actually below that provided to the agency in FY1995. The reduced funding has resulted in a 10 percent contraction in the S&T workforce over the past 20 years, which places extraordinary pressure on the agency to provide the S&T support required by EPA and other federal and state organizations. The Task Force feels that the President's Budget allocation for FY16 is warranted given the nation's environmental challenges. Additional R&D funds are needed in order to enhance study responses to resolve hydraulic fracturing and oil shale waste issues, to better understand the impacts of climate change, to support the development of terrestrial carbon sequestration and management, to help guide the proper development of biofuels, to improve our understanding of chemical safety and toxicology, to measure the environmental impacts of nanotechnology, to promote sustainable waste management, and to better understand water resources utilization and development.

The Task Force's comments on the FY16 budget focus on the mechanical engineering-intensive activities of the S&T portfolio within the EPA's Office of Research and Development (ORD). The change in funding levels supporting these core objectives in the last two budget cycles along with the proposed FY16 budget figures are as follows:

	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>
Indoor Air and Radiation	\$7.2M	\$5.9M	\$6.6M
Homeland Security	\$38.5M	\$37.1M	\$38.1M
Clean Air and Climate	\$110.3M	\$116.5M	\$124.8M
Safe and Sustainable			
Water Resources	\$120.0M	\$107.4M	\$111.0M
Human Health Protection	\$3.7M	\$3.5M	\$3.7M
Air, Climate, and Energy Research	\$99.4M	\$91.9M	\$100.3M

EPA Office of Research and Development (ORD)

Through research and technical assistance, ORD provides the scientific foundation for EPA by performing research and development to identify and solve present and future environmental issues and provide responsive technical support to its scientific partners. The ORD administers programs addressing both basic research and the development of the scientific tools used to understand and evaluate environmental health. ORD also conducts problem-driven research designed to provide scientific solutions to high-priority environmental problems. It is an invaluable national resource.

We note that the ORD workforce has declined in each of the last 5 fiscal years – a loss of more than 200 environmental science professionals – a staffing level that makes it difficult to permit efficient action on a number of topics of national importance, particularly toxicology, nanotechnology, sustainable waste management and water resources. Effort should be made to bring ORD staff to approximately pre-sequestration levels so that EPA can continue to support R&D on current and future environmental problems.

The Task Force supports the increases requested for the EPA's S&T directorate, which partially reverses several years of funding decreases. An evaluation of EPA's resources is needed to ensure

that it can balance between existing priorities and new challenges. Program specifics are outlined below:

Indoor Air and Radiation

	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>
Indoor Air: Radon Program	\$0.21M	\$0.19M	\$0.0M
Reduce Risks from Indoor Air	\$0.36M	\$0.31M	\$0.41M
Radiation Protection	\$2.5	\$1.9M	\$2.1M
Radiation Preparedness Response	\$4.1M	\$3.5M	\$4.0M

The Task Force supports the EPA’s replacement of the Radon Program with the Federal Radon Action Plan, which will leverage industry and nonprofit efforts to amplify existing federal efforts to reduce radon risk.

Homeland Security

	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>
Critical Infrastructure Protection	\$10.2M	\$10.3M	\$11.8M
Preparedness, Response and Recovery	\$27.8M	\$26.2M	\$25.6M
Protection of EPA Personnel and Infrastructure	\$0.54M	\$0.54M	\$0.60M

Homeland security activities are a significant component of the EPA’s S&T activities, focusing on critical infrastructure protection and disaster preparedness and response. The Task Force supports the additional funding allocated to the Critical Infrastructure Protection program.

Clean Air and Climate

	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>
Climate Protection	\$11.7M	\$8.0M	\$7.8M

The EPA Task Force views Climate Protection Research as an important issue and is somewhat surprised by the funding trajectory for this program given funding levels supported in previous fiscal years. The Task Force supports this request given the constrained budget environment.

Research: Air, Climate and Energy

	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>
S&T Activities	\$99.4M	\$91.9M	\$100.3M

The EPA Task Force supports the full FY16 increased request for Air, Climate and Energy Research, particularly the additional proposed funding for hydraulic fracturing programs and carbon sequestration.

Safe and Sustainable Water Resources

	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>
Research	\$120.0M	\$107.4M	\$111.0M

Safe and Sustainable Water Resources funding supports a variety of activities related to the challenges facing U.S. water resources, including drinking water and wastewater from industrial

activities. The Task Force is pleased that sustainability funding has been increased, just over \$3.5 million, and supports the FY 2016 request.

Human Health Protection

	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>
Drinking Water Programs	\$3.7M	\$3.5M	\$3.7M

Overall, the FY16 budget request calls for a slight increase from the FY15 appropriated amount. The Task Force considers water quality issues as a high priority of the EPA and supports this request given the constrained budget environment.

Water Quality Research and Support Grants

The EPA Task Force urges Congress to again support funding for the Water Quality Research and Support Grants program. Last year, Congress provided \$4.1 million for this nationally competitive grant program to fund water quality and availability research. Given the severe droughts and water resource challenges facing many parts of the country, the Task Force supports funding at the FY15 appropriated level for this program.

Environmental Education

The FY16 budget includes \$10.9 million in funding to support Environmental Education, which was funded at \$8.7 million in FY 2015. Such investments are critical to providing fellowships for U.S. citizens who are scientists and engineers, ensuring top quality research and development of our nation’s S&T workforce.

Many of EPA’s environmental education activities have been transferred to the National Science Foundation (NSF) over the last two years, and we urge improved interagency coordination to ensure that the goals of EPA’s programs are met under NSF’s administration. The Task Force urges continued support (\$15 million) for EPA’s Science to Achieve Results (STAR) and Greater Research Opportunities (GRO) fellowship programs (program started in 1995) and urges the Committee to support strong funding for the National Center for Environmental Research.

Conclusion

The Administration’s FY16 request reflects of a difficult fiscal climate where tough choices have to be made to support important national priorities. This is particularly true for basic environmental research. As noted above, the Task Force requests additional funding be allocated for the toxicology, nanotechnology, sustainable waste management, and water resources (quality and quantity challenges) programs at EPA to ensure continued progress in our understanding of environmental and health impacts in these areas. Further, the Task Force proposes strong funding of EPA’s National Center for Environmental Research and National Risk Management Research Laboratory programs, urges the Committee to support funding for EPA’s graduate fellowships, and urges additional funding to ensure that full-time S&T staffing needs at EPA ORD are met.

This statement represents the views of the ASME EPA Task Force and is not necessarily a position of ASME as a whole.