



1828 L Street, N.W.

Tel 202.785.3756

Suite 906

Fax 202.429.9417

Washington, D.C. 20036

www.asme.org

**Position Statement on the Fiscal Year 2010 Budget Request for the Environmental Protection Agency (EPA) Science and Technology (S&T) Programs
Submitted by the ASME Environmental Protection Agency (EPA) Task Force
of the ASME Environmental Engineering Division**

June 19, 2009

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

The ASME Environmental Protection Agency Task Force is pleased to provide this testimony on the Fiscal Year 2010 (FY 2010) budget request for research and development programs in the Department of Energy (DOE).

Introduction

The 127,000-member ASME is a nonprofit, worldwide educational and technical Society. 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 sets some 600 industrial and manufacturing standards.

Background

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

The EPA plays an essential role in the nation's efforts to protect human health and safeguard the environment, and EPA's S&T research and development (R&D) activities are instrumental in improving environmental protection in a sound, sustainable, and cost-effective manner. R&D efforts are needed to improve environmental health and ecology, environmental monitoring, environmental technology development and implementation, pollution prevention, and to address the emerging concerns of climate change, as well as the environmental issues of homeland security and infrastructure protection.

The FY 2010 budget request for EPA is \$10.4 billion, a significant increase from the FY 2009 appropriated amount of \$7.6 billion. The EPA's Science and Technology Directorate would increase from \$790 million for FY 2009 to \$842 million in FY 2010, a \$52 million increase. After several years of funding decreases, the R&D funds could enhance major programs and also provide funding to study responses to climate change, terrestrial carbon sequestration and management, biofuels and oil shale waste issues, and nanotechnology development.

Overview of the ASME Task Force Review

We will focus our analysis on the R&D activities within the S&T portfolio within the

EPA's Office of Research and Development (ORD) and the Superfund program that support eight strategic programmatic research areas:

- I. Clean Air and Global Climate Change
- II. Clean and Safe Water
- III. Land Preservation and Restoration
- IV. Human Health and Ecosystems
- V. Compliance and Environmental Stewardship
- VI. Toxic Research and Prevention
- VII. Sustainability
- VIII. Homeland Security

The change in funding levels supporting these core objectives between FY 2009 and FY 2010 is as follows:

	<u>FY 2009</u>	<u>FY 2010</u>	<u>Change</u>
Clean Air Research	\$ 98.4M	\$ 104.1M	+\$5.7M
Clean Water	\$ 106.2M	\$ 110.4M	+\$4.2M
Land Protection and Restoration	\$ 13.6M	\$ 13.8M	+\$0.2M
Human Health and Ecosystems	\$ 229.4M	\$ 245.3M	+\$15.9M
Toxic Research and Prevention	\$ 26.9M	\$ 27.8M	+\$0.9M
Sustainability	\$ 21.1M	\$ 24.1M	+\$3.0M
Homeland Security	\$ 23.4M	\$ 23.9M	+\$0.5M
	<u>\$ 519M</u>	<u>\$ 549.4M</u>	<u>+\$30.4M</u>

EPA Office of Research and Development

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 providing responsive technical support to its scientific partners. The ORD administers programs addressing both foundational research to improve the scientific tools used to understand and evaluate environmental health as well as problem-driven research designed to provide scientific solutions to high-priority environmental problems. It is an invaluable national resource.

We support the increases requested for the EPA's S&T directorate, which 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 issues are outlined below:

Clean Air Research

	<u>FY 2009</u>	<u>FY 2010</u>	<u>Change</u>
Global Change	\$ 17.8M	\$ 20.9M	+\$3.1M
Clean Air	\$ 98.4M	\$ 104M	+\$5.6M
	<u>\$ 116.2M</u>	<u>\$ 124.9M</u>	<u>+\$8.7M</u>

Funding for Global Change research has risen at a time when the nation views this as a critical issue. We urge Congress to appropriate additional funds for Global Change to at least the FY 2010 requested level. *The Task Force supports the current request for Clean*

Air and Global Change Research.

Clean Water Research

	<u>FY 2009</u>	<u>FY 2010</u>	<u>Change</u>
Clean Water	\$ 106.2M	\$ 110.4M	\$+4.2M

Overall, the FY 2010 budget request calls for an increase of about \$4 million over the FY 2009 appropriated amount. This increase will help support the long-term development of infrastructure related to water quality issues. *The Task Force is pleased with the increases for Clean Water Research and urges Congress to sustain funding for the Drinking Water and Water Quality programs consistent with the FY 2010 request.*

Land Protection and Restoration

	<u>FY 2009</u>	<u>FY 2010</u>	<u>Change</u>
Land protection research:	\$13.6M	\$13.8M	\$+0.2M

The \$196,000 increase in land protection and restoration research comes as ecosystem research and sustainability and environmental management are being raised. Still, further support would greatly assist this program with studies related to the impact of carbon sequestration, something that may be implemented in the U.S. This research is expensive but necessary. Therefore, *the Task Force recommends that additional funding for land protection and restoration be appropriated for FY 2010.*

Sustainability Research*

	<u>FY 2009</u>	<u>FY 2010</u>	<u>Change</u>
Sustainability	\$ 21.1M	\$ 24.1M	\$+3.0M

Funding for Sustainability research is slated for an increase of \$3 million for this year. *The Task Force recommends that funding for sustainability research be appropriated at requested levels for FY 2010.*

Toxic Research and Prevention

	<u>FY 2009</u>	<u>FY 2010</u>	<u>Change</u>
Toxic Research and Prevention	\$ 26.9M	\$ 27.8M	\$+0.9M

Funding for Toxic Research and Prevention is slated for an increase of just under \$1 million for FY 2010. *The Task Force recommends that funding for Toxic Research and Prevention be appropriated at requested levels for FY 2010.*

Human Health and Ecosystems

	<u>FY 2009</u>	<u>FY 2010</u>	<u>Change</u>
Endocrine disruptors	\$ 11.4M	\$ 11.4M	\$0.0M
Fellowships	\$ 9.7M	\$ 10.9M	\$+1.2M
Computational toxicology	\$ 15.2M	\$ 19.6M	\$+4.4M
	\$ 36.3M	\$ 41.9M	\$+5.6M

Although other agencies are receiving increased funding for research to support long-

term energy reliability and sustainability, such as oil shale, biofuels, and carbon capture and sequestration, EPA has not received funding to assess the ecosystem impacts of these major initiatives. *The Task Force supports the FY 2010 proposed budget for ecosystems research, which will foster new technologies that minimize future environmental damage.*

Homeland Security

	<u>FY 2009</u>	<u>FY 2010</u>	<u>Change</u>
Water Sentinel	\$ 14.9M	\$ 23.7M	\$+8.8M
Decontamination	\$ 26.4M	\$ 25.4M	\$-1.0M
	\$ 31.3M	\$ 49.1M	\$+7.7M

Homeland security activities are a significant element of EPA’s S&T activities, focusing on critical infrastructure protection and disaster preparedness and response. *The Task Force believes that the emphasis on homeland security at EPA is justified and that the increase is sufficient to meet the program’s objectives. Continued support should be provided to improve water security and enhance preparedness for biological and chemical threats.*

Environmental Education

The FY 2010 EPA budget requests \$10.9 million to support research fellowships, a slight increase from the previous fiscal year. The STAR (Science to Achieve Results) fellowship program is the only federal fellowship program designed exclusively for students pursuing advanced degrees in environmental sciences and engineering. This is an important investment and the Task Force fully supports this program. *The Task Force urges Congress to increase funding for STAR fellowships. It is essential to encourage students to pursue careers in environmental science and engineering. Such investments are critical to addressing environmental concerns, bolstering our nation’s workforce, and maintaining its competitiveness.*

Conclusion

Although the Administration’s FY 2010 request is strong overall, the Task Force requests additional funding for the Land Protection and Restoration program to support further research into the possible storage of carbon dioxide emissions as part of carbon capture and storage (CCS) technology deployment.

The proposed FY 2010 EPA Science and Technology budget includes increases for a number of program areas, and the overall research budget has reached historic highs, reversing a downward trajectory for this agency from the past few years. We recommend that the ORD budget be sustained for the health of the EPA’s S&T Directorate. This is necessary to preserve EPA’s important contribution in meeting the challenges of our natural resource and policy issues in compliance with its regulatory mission.

This statement represents the views of the EPA Task Force of the Environmental Engineering Division (EED) of ASME’s Technical Communities and is not necessarily a position of ASME as a whole.