

**COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY  
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT  
U.S. HOUSE OF REPRESENTATIVES**

**HEARING CHARTER**

*Fostering Quality Science at EPA: Perspectives on Common Sense Reform – Day II*

Friday, February 3, 2012  
10:00 a.m. to 12:00 p.m.  
2318 Rayburn House Office Building

**PURPOSE**

On Friday, February 3, 2012, the Subcommittee on Energy and Environment of the Committee on Science, Space, and Technology will hold a second day of testimony to provide external perspectives on the need to reauthorize and reform science, research and development activities at the Environmental Protection Agency (EPA); explore the intersection of Agency-supported science and its regulatory mission; and receive focused recommendations to raise the level, quality, usefulness, and objectivity of EPA science, including any necessary changes to the Environmental Research, Development and Demonstration Authorization Act.

**WITNESSES**

**Mr. Daniel Greenbaum**, President and Chief Executive Officer, Health Effects Institute

**Dr. Deborah Swackhamer**, Professor, Environmental Health Sciences, University of Minnesota, and Chairwoman, EPA Science Advisory Board

**Mr. Michael Walls**, Vice President, Regulatory and Technical Affairs, American Chemistry Council

**Dr. Richard Belzer**, President, Regulatory Checkbook

**Dr. Jerald Schnoor**, Allen S. Henry Chair in Engineering, Department of Civil and Environmental Engineering, University of Iowa

**Dr. S. Stanley Young**, Assistant Director for Bioinformatics, National Institute of Statistical Sciences

**BACKGROUND**

The Environmental Research, Development, and Demonstration Authorization Act (ERDDA) authorizes research and scientific activities at the Environmental Protection Agency (EPA). Originally enacted in 1976, Congress subsequently passed annual authorizations through fiscal year 1981. In addition to establishing annual authorization levels, these statutes also directed EPA policy in a variety of areas,

including establishing the Office of Research and Development (ORD)<sup>1</sup>, requiring a 5-year environmental R&D plan, and creating EPA's Science Advisory Board (SAB).

<b>Year</b>	<b>Act</b>	<b>Public Law Number</b>
1976	ERDDA	94-475
1977	ERDDA of 1978	95-155
1978	ERDDA of 1979	95-477
1979	ERDDA of 1980	96-229
1980	ERDDA of 1981	96-569

Since 1981, there have been a number of bills introduced to reauthorize ERDDA that were not ultimately enacted into law.<sup>2</sup> As a result, explicit authorization of EPA's environmental R&D ended at the end of fiscal year 1981. This failure to comprehensively reauthorize EPA research, development, and demonstration programs and activities illustrates a broader trend among expired environmental statutes. The Congressional Research Service notes this trend, stating "Although Congress somewhat recently has renewed the authorization of appropriations for certain EPA programs and activities through targeted amendments to various statutes, a more comprehensive reauthorization of many of the statutes that EPA administers has not been enacted for a number of years."<sup>3</sup>

In addition to ERDDA, EPA also derives authority for R&D activities through other major environmental statutes. For example, under the Clean Air Act, the EPA Administrator must issue criteria that "accurately reflect the latest scientific knowledge useful in indicating the kind of extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air."<sup>4</sup> Through the Safe Drinking Water Act (SDWA), EPA sets standards based on "the best available, peer-reviewed science and supporting studies conducted in accordance with sound and objective scientific practices."<sup>5</sup> Similarly, the Clean Water Act (CWA) requires EPA to publish water quality information "accurately reflecting the latest scientific knowledge."<sup>6</sup>

In many cases, these major regulatory statutes also authorize specific R&D programs and activities. For example, the Clear Air Act established a national research and development program for the prevention and control of air pollution including establishing technical advisory committees and research on air pollutant monitoring. The SDWA authorized the Administrator of EPA to conduct research and studies relating to the causes, diagnosis, treatment, control, and prevention of physical or mental diseases resulting directly or indirectly from contaminants in the water including improved methods to identify and measure contaminants in drinking water and improved methods to identify and measure the health effects of contaminants in drinking water. The CWA directed the Administrator to establish national programs for the prevention, reduction, and elimination of pollution and as part of such programs to

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<sup>1</sup> See Appendix 1 for EPA organizational structure.

<sup>2</sup> HR 3115 (1982), HR 2804 (1982), S. 1205 (1982), S. 2577 (1983), HR 2899 (1984), S. 1292 (1984), HR 2319 (1985), S. 2702 (1985), S. 1144 (1986), HR 2355 (1987), HR 1523 (1987), HR 2153 (1989), HR 4873 (1990), HR 2404 (1991), S. 1655 (1991), HR 1994 (1993), S. 1545 (1993), HR 2405 (1995), HR 1814 (1995), HR 3322 (1996), HR 1276 (1997), HR 1742 (1999), HR 1743 (1999).

<sup>3</sup> Congressional Research Service, "Environmental Laws: Summaries of Major Statutes Administered by the Environmental Protection Agency," RL30798, August 11, 2011.

<sup>4</sup> 42 U.S.C. §7408 (a)(2) (2000).

<sup>5</sup> 42 U.S.C. §300g-1(b)(3)(A)(i).

<sup>6</sup> 33 U.S.C. §1314 (a)(1).

work in cooperation with other State and Federal agencies to coordinate and accelerate research, investigation, experiments, demonstrations and studies relating to the causes, effects, extent, prevention, reduction and elimination of pollution in the navigable waters of the U.S.

The science enterprise at EPA is spread across program offices and regions. ORD is organized into three national labs (comprised of 18 separate labs) and four national centers (which have 19 divisions).<sup>7</sup> In addition to 18 labs within ORD, there are 9 labs split among several program offices and each of the 10 regions has its own lab.<sup>8</sup> In FY2010, the appropriations level for EPA Science and Technology activities (S&T includes ORD and the other 19 labs) was \$874.9 million. The appropriations level for FY2011 was \$840.3 million. The FY2012 House Committee-passed appropriations level is \$777.6 million and the FY2012 Senate Committee draft appropriations level is \$809 million.

The fragmented nature of EPA R&D presents a challenge to program management and coordination, and has complicated efforts to evaluate the effectiveness of these activities. Numerous studies conducted by the EPA Office of Inspector General, the Government Accountability Office, and others have cited significant concerns with the science activities of the Agency and the difficulties in evaluating the usefulness of the science to program needs. These studies have offered recommendations on how to improve the science enterprise at EPA, but many of these recommendations have not been implemented.

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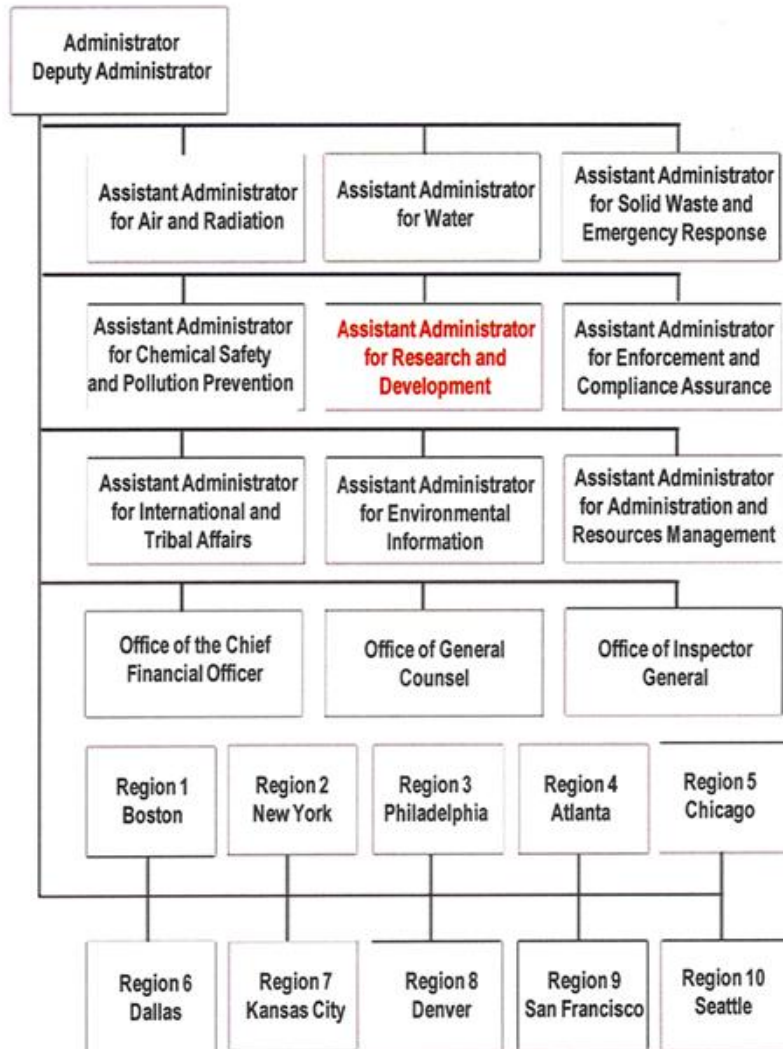
<sup>7</sup> See Appendix 2.

<sup>8</sup> See Appendix 3.

# Appendix 1



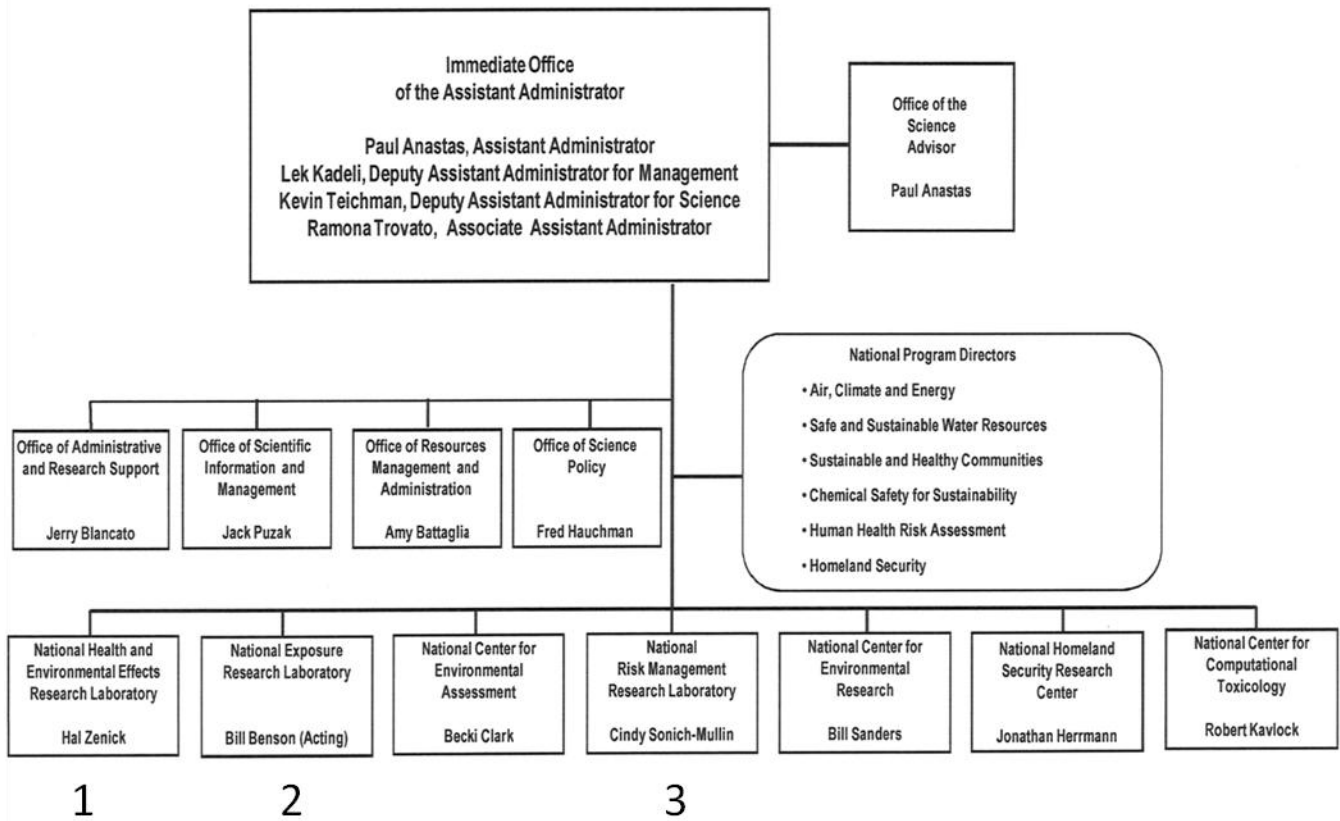
## U.S. EPA Organizational Chart



## Appendix 2

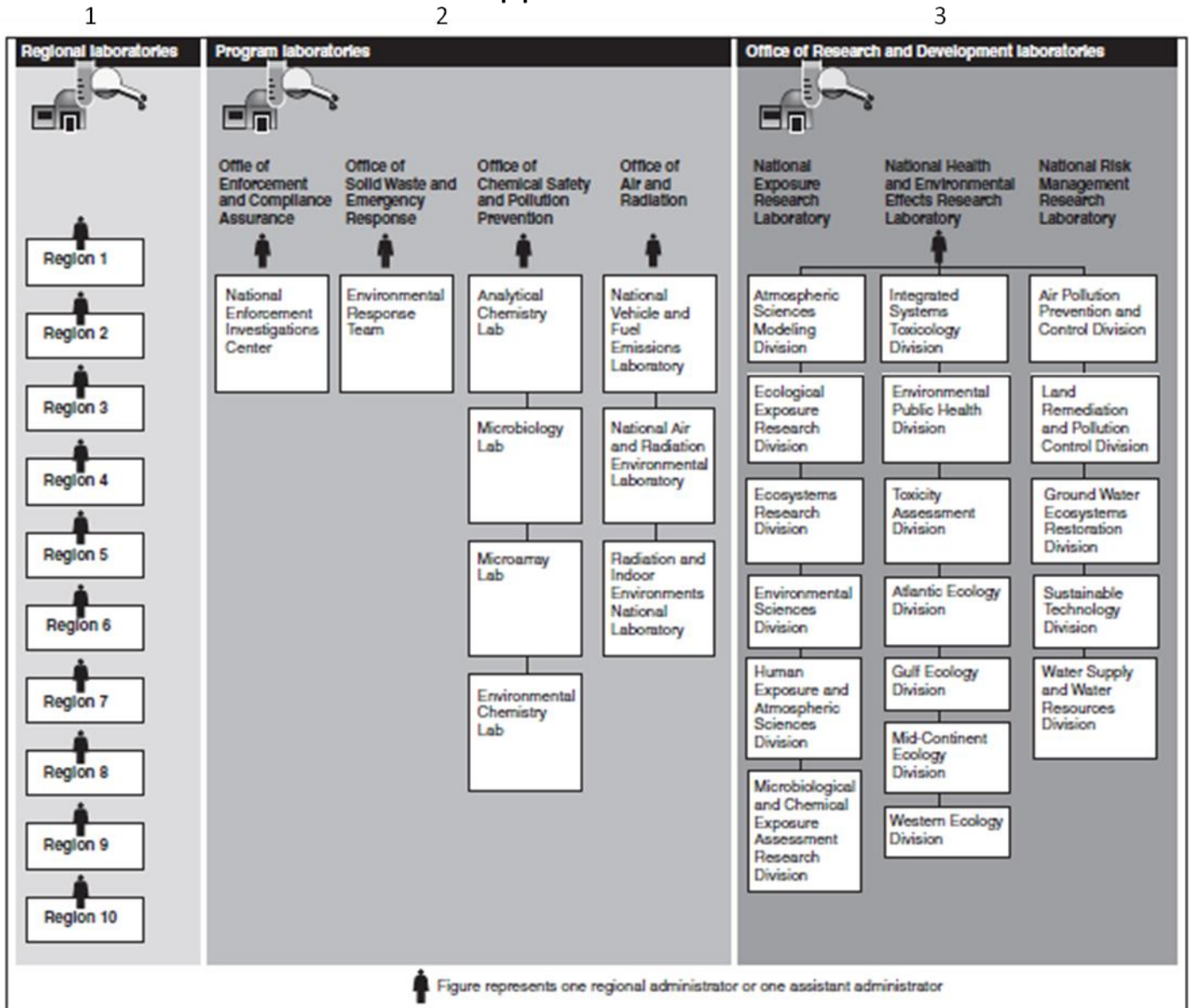


# ORD's Organization



The bottom of this chart shows three national labs and four national centers. The three national labs are broken down in Appendix 3.

# Appendix 3



Source: GAO.

Column 1 shows 10 regional labs. Column 2 shows 9 program labs. Column 3 shows 18 ORD labs.