Goal 3 Be a Leader in the Environmental Research Community

Goal Statement

ORD will enhance its role as a national leader in the science and engineering research that underpins protection of human health and the environment, both by conducting and sponsoring mission-critical research and by playing a pivotal role in the development of a national environmental research agenda.

What This Goal Means

ORD's science leadership involves playing a key role in:

- Defining and developing a national environmental research agenda;
- Upholding the highest standard of independence, objectivity, and excellence in research;
- Being viewed as a source of expertise and knowledge by the scientific community and the American public;
- Communicating the value and results of scientific work; and
- Being a prominent participant in scientific and professional organization activities.

Leadership is not the same as recognition, and it is not limited to the individual. While ORD seeks to be recognized for the excellence of its work and the expertise and accomplishments of its staff, we also intend to lead by helping to coordinate the research direction and priorities of other organizations and by being a resource for communicating complex issues of science and risk to the American public.

In this context, ORD's science leadership will have several important dimensions. First, we will ensure that



all of our research is: focused on issues of importance to the Agency; provided in a timely, understandable, and useful format; and used in a rigorous and credible fashion. We will maintain our unwavering commitment to sound science—science that is independent, objective, and carefully peer-reviewed.

Second, we will involve others in achieving our research mission. ORD has only about 5 percent of the federal environmental research budget in the United States. As a result, we seek to exert a beneficial influence on the direction of environmental research conducted elsewhere in the federal government by cooperatively developing a national environmental research agenda.

Finally, we must exhibit leadership in a community-wide sense. This involves helping to define the national agenda through attracting and supporting the next generation of scientists early in their professional careers, being the prime source for reliable environmental data and methods, sponsoring meetings and workshops, and partnering with universities and other research organizations to leverage our skills and resources.

Cultivating and sustaining science leadership translates into exhibiting leadership at all organizational levels. Our scientists and engineers will be widely acknowledged as leaders in their respective research areas. Our managers and supervisors will be champions for science and science quality and leaders within EPA and ORD to ensure that our research is focused and timely. Corporately, ORD will strive to play a critical role in all aspects of national research initiatives that provide the scientific basis for EPA's mission. In addition, we will be leaders in communicating our research results to all of our stakeholders outside of EPA.

Why This Goal Is Important for ORD

Solving the complex environmental problems of the new century will require substantial leadership to focus research on issues that pose the greatest environmental risks. It is particularly important for ORD to conduct, stimulate, and support critical environmental research that will lead to a significantly better understanding of environmental risks and development of effective and efficient solutions to environmental problems. Within EPA, ORD's leadership to uphold the highest standard of independence, objectivity, and excellence in research will contribute to sound decision-making and efficient programs, thereby enhancing the public's confidence in EPA and its mission. At the same time, ORD's leadership in communicating risk and scientific information to the American people will help them to make their own informed decisions about environmental issues at either a local or national level, as consumers, commuters, property owners, and citizens.

Beyond EPA, ORD has an important leadership role in catalyzing and coordinating the development of a national environmental research agenda. To fill this role, ORD must hold the trust, respect, and confidence of scientists and administrators in other federal agencies, universities, and external research organizations. This trust will arise from the quality of our work, and the active and prominent participation of our scientists in professional societies and associations. Such activities will further ORD's ties to the scientific community, provide professional development opportunities and recognition to staff, and support Goal 4 on integration by fostering collaboration across organizations, disciplines, and topics.

Goal 3 Objectives and Actions

- 3.1 Lead the development and definition of a national environmental research agenda for integrating and coordinating federally funded environmental research.
- 3.1.1 Establish a cross-agency workgroup to engage and coordinate with stakeholders and evaluate long-term needs to be addressed in a national environmental research agenda.
- 3.1.2 Look for innovative ways to integrate federally funded environmental research across institutions.
- 3.1.3 Coordinate with existing science policy institutions, such as the Office of Science and Technology Policy, the National Academy of Sciences, and other academic and scientific institutions.
- 3.2 Uphold the highest standard of independence, objectivity, and excellence.
- 3.2.1 Improve and expand EPA's scientific peer review processes.
- 3.2.2 Account for peer review of plans, results, and interpretation in the development of Lab/Center operating plans, as well as project completion schedules.



3.3 Be a widely used source of expertise and knowledge.

- 3.3.1 Enhance the stature and visibility of ORD's science through an environment that fosters publication in high-quality journals and presentations at national and international scientific and technical meetings.
- 3.3.2 Provide incentives for external collaborative research projects, programs, and workshops with researchers at universities and other research institutions.
- 3.3.3 Provide incentives to encourage scientists to assume national leadership roles in professional organizations, such as scientific societies, editorial boards, advisory boards, and adjunct university appointments.
- 3.3.4 Organize and sponsor technical workshops and symposia on emerging environmental problems and cutting-edge science.

3.4 Communicate the results and value of ORD research.

3.4.1 – Build a capacity to measure the effectiveness of ORD's major research programs and benchmark measures of effectiveness against other scientific organizations.

- 3.4.2 Develop and implement improved mechanisms for synthesis and communication of research results and risk information to ORD's diverse audiences.
- 3.4.3 Invest in information technology including an expansion of ORD's Web presence to share information and promote collaboration.
- 3.4.4 Develop a standard format/logo/look for EPA/ ORD products so that they are instantly recognizable to customers and stakeholders.

Measures of Success

The measures of leadership are how positively we are viewed and how much our scientific contributions are valued, on an individual and organizational level, by our customers and stakeholders. This feedback must come from a variety of audiences—experts in specific disciplines, the broader scientific and environmental protection communities, Congress, and the American people.

Measures of leadership at the individual level include the following:

- External awards and recognition for ORD scientists;
- Publications in high-quality journals;
- Appointments to scientific societies, editorial boards, and adjunct university positions;
- Leadership roles at professional and scientific meetings, conferences, and symposia; and
- Invitations to ORD scientists to participate in conferences, workshops, symposia, and peer reviews.

Measures of leadership at the organizational level include the following:

- The creation and implementation of a national environmental research agenda and the extent to which it guides the planning and funding of environmental research;
- Citation rates as an indicator of quality and impact of publications;
- Critiques from independent organizations [e.g., National Research Council (NRC), SAB] regarding the independence, objectivity, and excellence of our research;
- Research programs involving multiple agencies or institutions;

- Requests from international organizations to visit EPA facilities or invitations to participate in their planning and review activities;
- Workshops and symposia conducted with researchers from other organizations;
- Cooperative Research and Development Act Agreements and Interagency Agreements;
- Requests for ORD research results and expertise from outside ORD; and
- Visits to the ORD Web site, including downloading of documents and reports.

