

MEMORANDUM OF UNDERSTANDING

Between

U.S. Department of Health and Human Services, National Institutes of Health,
National Institute of Environmental Health Sciences,
and the
U.S. Department of the Interior, U.S. Geological Survey

Subject: Memorandum of Understanding (MOU) between the U.S. Department of Health and Human Services, National Institutes of Health, National Institute of Environmental Health Sciences (NIEHS), and the U.S. Department of the Interior, U.S. Geological Survey (USGS)

1. Introduction: The NIEHS and USGS wish to join forces to investigate the causes of some environmentally related public health problems. The NIEHS and the USGS, agencies of the Departments of Health and Human Services and the Interior, respectively, have specific technical expertise. Both agencies have strong scientific backgrounds that are important to the solution of environmental health sciences problems. The joint capabilities of the agencies are well suited for successful completion of studies necessary to detect and prevent the cause of environmental diseases.

2. Purpose: This MOU is intended to establish a substantive partnership between the USGS and NIEHS by increasing interaction and enhancing collaboration on specific projects to best serve and maintain the public's health.

The NIEHS and the USGS agree to collaborate on high-priority programs by contributing the individual unique strengths and expertise of the respective agencies to advance environmental health sciences and to reduce the burden of environmentally related diseases. Each project, as agreed upon by both agencies, will specify the respective roles and will constitute a signed, formal addendum to this agreement. It is our belief that NIEHS and the USGS can effectively strengthen the scientific base for evaluating the causes and prevention of human disease related to exposure to environmental agents.

3. Need: Currently, health professionals and scientists are limited in their ability to determine the true contribution that exposure to environmental agents presents in the development of human diseases. Little is known about actual human exposure to and body burden from chemicals and pathogens, and this lack of knowledge creates much of the uncertainty in the impact of exposure on human health. Collaborative projects between the USGS and NIEHS will generate new data to establish research priorities and provide a critical component of the scientific base necessary to determine how environmental exposures contribute to human disease. More specifically, a collaboration will (1) improve human estimates of risk to environmental hazards, (2)

identify susceptible sub-populations, and (3) provide the basis for evaluating the health consequences of human exposure to mixtures of toxic chemicals typically found in the environment. The opportunity to analyze exposure information, when linked to epidemiological, toxicological, and mechanistic data, will facilitate more comprehensive evaluations of risk.

Clearly, there is a need for a coordinated program which will combine mechanistic toxicology with exposure assessment, individual susceptibility, and molecular epidemiology to identify better preventative strategies.

4. Scope: This agreement provides the mechanism for collaboration between the USGS and NIEHS. The USGS and NIEHS agree to provide support within the scope of their scientific capabilities and agency missions by applying technologies, scientific skills, and analytical tools in such areas as hydrologic and environmental characterization, chemical, biological and geochemical analysis; transport mechanisms; geographic information system (GIS) applications; review of technical reports, and determination of public health indicators as necessary. It is also understood that the ability of the USGS and NIEHS to conduct specific projects will depend upon the availability of qualified staff and appropriate funds.

5. Understandings, agreements, support, and resource needs: The NIEHS and USGS agree to work together to establish projects of mutual interest and benefit. Each time a project is identified, the NIEHS and USGS will develop the appropriate documentation, such as an interagency agreement (IAG) or a project proposal, that contains mutually agreed upon terms of the activity. The IAG or project proposal will address issues of funding, manpower, timelines, publication of reports, billing, and other necessary requirements.

NIEHS and USGS representatives are as follows:

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6. Effective date: This MOU will become effective upon the date of the last signature and will remain in effect unless terminated by (a) mutual consent by both parties or (b) either party by providing 120 calendar days written notice to the other party. In the event of termination, the servicing agency shall not be responsible for any costs incurred by the funding agency associated with procuring services from an alternative

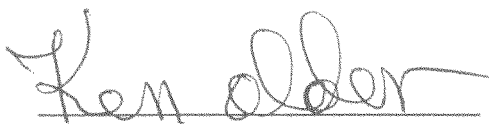
source; nor shall the funding agency be relieved of responsibility for costs incurred by the servicing agency that are covered by this MOU, including allowable costs of contractors under this MOU and costs of closing out or transferring any ongoing obligation. Upon termination of this MOU, both agencies agree to share work products prepared either in-house or by its contractor(s), under this MOU. This MOU may be modified upon mutual agreement of both parties.

7. Authority: This agreement is entered into pursuant to the authority contained in the Intergovernmental Cooperation Act PL 90-577 U.S.C. 6501 (1968), the Clean Water Act, as amended, and the Economy Act of 1932, as amended (31 U.S.C. 1535). Further legislative authorities are established by the USGS Organic Act (43 U.S.C. 31) and Section 301(a) of the Public Health Service Act (42 U.S.C. Section 241). By execution of this agreement, the funding agency certifies that every order will be in the Government's best interest and that the services set forth in the task orders arising hereunder cannot be provided as efficiently, conveniently, or as cost effectively by a commercial enterprise.



Charles G. Groat
Director
U.S. Geological Survey
Reston, Virginia

Date: 12/24/98



Kenneth Olden, Ph.D., Director
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Date: 1/15/99