Strategic Elements for Environmental Justice*

Goal:

To ensure that disproportionately high and adverse environmental and health effects experienced by low-income and minority populations are addressed, as appropriate, in the programs of the Department of Health and Human Services (HHS), and that these programs encourage the full involvement of affected parties.

Introduction

On February 11, 1994, President Clinton signed executive order 12898, Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations. This Executive Order requires each federal agency to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions. Under the terms of the executive order, each federal agency is required to develop an agency-wide environmental justice strategy.

"Environmental Justice" seeks to ensure that no population is forced to shoulder a disproportionate burden of the negative human health and environmental impacts of pollution or other environmental hazards. HHS's strategic plan is one component of the overall federal effort to address such disproportionate burdens in low-income communities and minority communities.

This outline of the HHS strategy for addressing disproportionate environmental and human health burdens in low-income and minority communities is divided into six sections. The first and most important section describes the Department's objectives for creating partnerships with the public in the activities described in the strategy. The next four sections cover the activity areas addressed in the strategy: Public Education and Training, Services, Data Collection and Analysis, and Health Research; the last section describes strategies for interagency coordination of these programs. Policy oversight mechanisms within HHS will be maintained to assure ongoing attention of HHS agencies and programs to advancing the agenda of environmental justice and to safeguarding against unintended environmental consequences of their activities.

For this document, "public" means any affected or interested party, with special emphasis on minority and low-income communities and workers, and including, but not limited to, state and local governments and agencies, tribal nations, Congress, other federal agencies, review bodies, community groups, environmental and other interest groups, business and industry, labor, religious and social organizations, the media, academia, professional and technical organizations, educational organizations, employees and contractors, and members of the general, unaffiliated public.

Oversight and coordination for implementation of this strategy will be the responsibility of the Assistant Secretary for Health working with the Public Health Service (PHS) agencies. The Environmental Health Policy Committee (EHPC) is an HHS committee established to coordinate policy development for environmental health activities related to the mission of the PHS and its agencies. It serves as the primary focal point within the Department of Health and Human Services for promoting the exchange of environmental health information and for providing review, advice, and consensus facilitation where necessary on environmental health research, exposure assessments, risk assessments, and risk management procedures. The EHPC is chaired by the Assistant Secretary for Health and includes agency heads and other leaders from PHS agencies with environmental health missions.

HHS agencies will be required to prepare evaluation plans to measure progress on their objectives related to reducing the human health burdens of disproportionately high and adverse environmental exposures in low-income and minority communities. Agencies will engage public participation in the development of their implementation plans.

The objectives and strategies outlined in this plan are based on current HHS activities and programs in place. The strategic plan organizes these programs so as to address key environmental justice goals within existing resources and authorities. The key to the success of this strategy will lie in fostering partnerships with members of the public, especially residents of low-income and minority communities, and in promoting collaboration and coordination between HHS agencies, so that HHS's programs can be as effective as possible in addressing the health impacts in low-income and minority communities of disproportionately high and adverse environmental exposures.

I. Public Partnerships

Objective 1: In the context of HHS programs and available resources, ensure that members of the public are meaningful partners in all appropriate departmental activities to address the health impacts of disproportionately high environmental hazards in low-income and minority communities, including education, training, provision of services, data collection, and research.

Strategies:

- Work with affected communities and potentially affected communities to enhance their capacity to participate in the partnership.
- Engage the public's involvement in identifying a full range of alternative approaches to developing a broad-based consensus on what the objectives should be to address disproportionate environmental hazards in low-income and minority communities, and on how to achieve those objectives.
- Ensure that each HHS agency provides opportunities for meaningful participation by interested members of the public, including residents of minority and low-income communities, before making decisions that will affect the public.

Objective 2: In the context of HHS programs and available resources, provide mechanisms by which each relevant HHS agency can develop public participation plans.

Strategies:

- Improve the working relationships within and among HHS
 agencies and between HHS agencies and the public in order to
 facilitate and maintain credible and open decision-making
 processes and to coordinate and integrate public participation
 activities.
- Encourage cooperation between HHS and contractors in identifying and resolving major issues that are relevant to the objectives of the executive order.

^{*}This report was prepared by the Subcommittee on Environmental Justice, Environmental Health Policy Committee, DHHS.

 Educate HHS grantees pursuing environmental justice-related activities funded by HHS agencies about HHS public participation objectives, and encourage them to meet those objectives.

II. Public Education and Training

Objective 1: In the context of HHS programs and available resources, educate residents and workers in affected communities through effective outreach, education, and risk communication.

Strategies:

- Develop a plan of action in collaboration with target communities that includes scientific investigation as well as appropriate educational campaigns to educate minority and low-income populations about environmental and occupational hazards; make sure that educational materials are appropriate, understandable, and efficacious (including preparation in languages other than English where needed).
- Conduct training workshops in health-risk communication and education for community members and workers; teach workers and members of low-income and minority communities about the relationship between pollution and adverse health effects and about the importance of various disease-prevention approaches, including pollution prevention and hazard abatement.
- Engage low-income and minority children and youth and their families in activities to address health impacts of disproportionately high and adverse environmental exposures through schools and the Head Start program.

Objective 2: In the context of HHS programs and available resources, establish strong ties with community-based organizations, workers' groups, public health agencies, and educational and religious institutions that may be able to help increase awareness of environmental hazards among those at risk.

Strategies:

- Identify barriers that may inhibit agencies from developing positive working relationships with these organizations.
- Educate HHS staff about the disproportionate environmental and health burdens in low-income and minority populations; send agency staff to visit affected communities whenever practicable and appropriate.
- Identify a mechanism for conducting ongoing relations with community-based organizations and leaders, public health agencies, and educational institutions within affected communities and with those interacting with these communities, especially historically black colleges and universities and other minority institutions (HBCUs/MIs).
- Encourage health professionals serving low-income and minority populations to participate in environmental and occupational health education workshops, scientific meetings, seminars, and other forums designed to enhance their knowledge of possible adverse health outcomes associated with exposure to environmental and occupational hazards.
- At the request of community organizations, conduct environmental health education seminars on the possible health effects of exposure to environmental and occupational hazards.

Objective 3: In the context of HHS programs and available resources, make environmental and occupational health data more available to the public and inform the public of how to gain access to this data.

Strategies:

Use community-based directories of organizations and individuals that promote environmental and occupational health awareness among underserved and low-income and minority populations to identify partners for collaborative educational and information-sharing activities.

- Establish repositories of environmental and occupational health data in public schools, public libraries, community colleges and universities, community organizations, and State Offices of Minority Health.
- Continue HHS efforts to expand the amount and scope of health information that is made available to the public; for example, make data from several surveys and the vital statistics program available on CD-ROM and in computer microdata tape format and on Internet.
- Collaborate and consult with members of at-risk communities, workers, and national minority organizations to determine the most effective methods of translating and disseminating occupational safety and health information.

Objective 4: In the context of HHS programs and available resources, focus training efforts to enhance the availability of specific skills and services needed by low-income and minority populations affected by disproportionately high and adverse environmental exposures.

Strategies:

- Protect low-income and minority workers disproportionately represented in hazardous occupations with programs to promote safe workplaces and work practices, including efforts such as the HHS program to train hazardous waste workers in the proper procedures to use when cleaning hazardous waste sites and disposing of hazardous materials.
- Expand on existing occupational and environmental medicine training opportunities, including professional training, continuing medical education, and curriculum development, for health care providers and public health personnel who serve a significant number of the minority and low-income populations at high risk for occupational exposure, and work with the professional organizations and societies of these providers continue to build an adequate workforce of environmental medical expertise that can help address the environmental health needs of low-income and minority populations disproportionately affected by high and adverse environmental exposures.
- Train residents of minority and low-income communities for certification in cleanup and remediation of environmental hazards.

III. Services

Objective 1: In the context of HHS programs and available resources, identify specific disproportionately high and adverse environmental hazards affecting workers and people in minority and low-income communities, identify the health problems associated with these hazards, and identify the needs and concerns of the people affected.

Strategies:

- Actively solicit information on specific environmental and occupational hazards and on people's health needs.
- Develop a method by which to assess local problems; use the assessment method as a basis for community education and involvement. Where appropriate, work through existing local groups and networks.
- Target existing HHS programs to train and equip residents of minority and low-income communities to carry out community and residential audits of environmental hazards.
- Design interventions to address the problems identified.

Objective 2: In the context of HHS programs and available resources, assess the capacity of low-income and minority communities affected by disproportionately high and adverse environmental exposures to diagnose, treat, and prevent environmentally sensitive medical problems, and as appropriate, seek to remedy any deficiencies.

Strategies:

- Provide technical assistance to low-income and minority communities impacted by disproportionately high and adverse environmental exposures to develop primary and preventive health programs aimed at specific environmental and occupational hazards.
- Provide as necessary for the medical testing of communities and workers with disproportionately high and adverse environmental exposures to determine the extent of exposure to hazardous substances.
- Identify community resources and barriers to care in order to promote access to primary care services in disproportionately affected communities; consider translation and outreach services, transportation, evening hours, and types of health services available.
- Work with state primary care associations and other state and local agencies to assure access to quality environmental and occupational medical care in affected communities.

Objective 3: In the context of HHS programs and available resources, take advantage of existing HHS programs that promote the economic potential of individuals and communities and provide opportunities for meaningful career development; use these programs as appropriate to advance the goals of the executive order by promoting the development of necessary environmental remediation and related services within disproportionately affected low-income communities and minority communities so as to provide them with an economic return.

IV. Data Collection and Analysis

Objective 1: In the context of HHS programs and available resources, improve the collection of monitoring and surveillance data on disproportionately high and adverse environmental hazards in minority and low-income communities and on the health status of residents.

Strategies:

- Continue HHS efforts to collect, maintain, and analyze data on disproportionately high and adverse exposures to environmental hazards and on indicator conditions (health outcomes associated with important environmental factors) in minority and lowincome communities.
- Wherever possible and appropriate, ensure that the data collected is sufficient to permit analysis of any linkages between exposures and health outcomes.
- Work with state, local, and tribal health officials, environmental health officials, regional health officials, and other federal agencies to improve health and environmental surveillance and monitoring activities in minority and low-income populations disproportionately impacted by high and adverse environmental exposures.

Objective 2: In disproportionately and adversely affected minority and low-income communities, and in the context of HHS programs and available resources, focus studies so as to provide low-income and minority residents with effective surveillance, monitoring, treatment, and prevention of adverse health effects.

Strategies.

- Use existing and new data to identify and target communities with disproportionately high rates of adverse effects from hazardous environmental conditions.
- Develop a coordinated, comprehensive program capable of addressing multiple environmental health and social problems in low-income and minority communities with disproportionately high and adverse exposures.
- Foster active partnerships and collaborations across HHS agencies, with state, local, and tribal governments, with private and voluntary sector groups, and with affected low-income populations and minority populations with disproportionately high and adverse environmental exposures.

• Involve members of the public in activities to collect data in affected communities wherever feasible and appropriate.

Objective 3: In the context of HHS programs and available resources, use information from State birth and disease registries to investigate the health effects of disproportionately high and adverse environmental exposures in low-income populations and minority populations.

Strategies:

- Evaluate existing registries and make recommendations regarding the methodologies they use.
- Consult with and assist states as appropriate to improve the capacity of their birth and disease registries.

V. Health Research

Objective 1: Design environmental and occupational health research programs within HHS in partnership with minority and low-income communities.

Strategies:

- Identify mechanisms such as regional meetings, register notices, and advisory and review bodies that can be used to engage the participation of low-income and minority communities and workers in the assessment, design, and conduct of environmental and occupational health research.
- Promote and institutionalize public participation in all phases of research through focus groups and peer review procedures.
- Incorporate information from low-income and minority communities and workers on their diseases and exposures when devising any environmental and occupational health research agenda.
- Collaborate and coordinate with community-based organizations, business and industry, academia, labor, and health professionals concerned about disproportionate environmental and health burdens in low-income and minority populations to develop new and relevant models for health research.

Objective 2: In the context of HHS programs and available resources, identify and characterize environmental and occupational factors that have the greatest disproportionate adverse impact on the health status of low-income and minority communities.

Strategies:

- Compile and document the extent of the problem by analyzing available data; document gaps in critical information.
- Identify high-risk populations, communities, industries, and occupations and document the environmental and occupational factors that have the greatest adverse impact on human health.
- Conduct epidemiologic research and surveillance on illnesses and injuries that disproportionately affect minority and low-income workers.
- Where appropriate, have studies take into account additional exposures due to such factors such as subsistence consumption of fish and wildlife and that study indicators are appropriate to the group, population, or community under study.
- As appropriate in the analysis of disproportionate adverse environmental and health impacts on low-income and minority communities, use and develop new models for occupational and environmental science research that can be used in population-, community-, and industry-based studies of 1) exposures and diseases among small numbers of people, 2) human exposures to low levels of a known environmental or occupational hazard (especially chronic, low-level exposures), 3) human exposures to combinations and mixtures of hazards at low levels for extended periods and at acute levels for short periods, and 4) new biological markers that can be used in identifying risk factors.
- Keep community members informed of the results of studies.

Objective 3: In the context of HHS programs and available resources, establish a coordinated program of environmental and occupational health research among the HHS agencies that is consistent with an overall departmental strategy for addressing disproportionate environmental and health burdens in low-income and minority populations.

Strategies:

- Maintain a structure within the HHS Subcommittee on Environmental Justice that will provide ongoing monitoring and evaluation of health research activities relevant to addressing the disproportionate environmental and health burdens in lowincome and minority populations.
- Establish and document specific coordination processes that address emerging issues in environmental and occupational health research.
- Establish HHS health research priorities, including issues of disproportionately high and adverse environmental health impacts in low-income and minority populations, through a regular Science Managers' Conference.
- Design and support collaborative interagency environmental and occupational health research projects to address adverse health impacts that fall disproportionately on low-income communities and minority communities.

VI. Interagency Coordination

Objective 1: Foster interagency coordination (both within HHS and between HHS and other agencies) in all activities related to addressing disproportionately high and adverse environmental health impacts in low-income and minority populations, including public education, training, the provision of services, regulatory activities, data collection, and research.

Strategies:

- Ensure that all HHS environmental justice-related activities and agency plans for implementation are reviewed by the Environmental Health Policy Committee (EHPC), chaired by the Assistant Secretary for Health, comprising agency heads, senior management representatives from PHS components with environmental health responsibilities, and liaisons from other key Federal agencies.
- Foster more in-depth coordination across agencies through the EHPC Subcommittee on Environmental Justice. This subcommittee includes representatives from the EHPC member agencies as well as from HHS components such as the Office for Civil Rights, the Administration for Children and Families, and the Health Care Financing Administration.
- Identify ways of better using the Healthy People 2000 program to address needs and goals relevant to disproportionate environmental health burdens in low-income and minority populations. Many of the existing Healthy People priority areas and objectives (such as Environmental Health, Cancer, and Occupational Safety and Health) have relevance to these disproportionate environmental health burdens and can be used as focal points for interagency activity.
- Coordinate plans and activities between federal, state, tribal and local agencies and community organizations through regional health officials and offices of minority health.
- Foster collaboration by conducting a regular conference of highlevel scientists from federal environmental health research agencies. Such collaboration is essential in order to generate data needed for key activities (regulation, risk assessment and avoidance, public education, pollution prevention and mitigation) and to help minority and low-income communities improve their environmental health and ensure environmental justice. (See the Research section.)
- Promote multiagency representation on working groups, steering

committees, and other bodies addressing issues germane to environmental justice.

Objective 2: In the context of HHS programs and available resources, develop, identify, and implement interagency projects aimed at reducing adverse environmental health effects in low-income and minority populations that can both exemplify and test interagency coordination processes. (See examples.)

Examples of Projects:

THE MISSISSIPPI DELTA PROJECT

Project Description: The overall goal of the Delta Project is to demonstrate that partnerships between government, academia, private sector organizations and community residents can identify key environmental hazards (and barriers to this identification), promote environmental quality, reduce and, where possible, prevent these hazards from impacting on health and the environment, with emphasis on persons in underserved communities. This goal will be pursued jointly by federal agencies (the Environmental Protection Agency, the National Institute of Environmental Health Sciences, the National Library of Medicine, the National Institute for Occupational Safety and Health/CDC, the National Center for Environmental Health/CDC, and the Agency for Toxic Substances and Disease Registry), state and local health departments, local community groups, and institutions of higher education, particularly those that serve large minority populations. By joining the interests, authorities, and resources of the relevant federal and state agencies, a more comprehensive and effective effort can be implemented to reduce and, where possible, prevent the health and environmental impacts of environmental hazards.

Because of the demographics and economic profiles inherent to the Mississippi Delta Region, this project will give special emphasis to identifying and reducing the disparities of environmental hazards experienced by disadvantaged communities and minority communities. Working closely with communities and historically black colleges and universities (HBCUs) in the region will be an essential component of this project.

Overall objectives of the Delta Project are these:

- Identify key environmental hazards and barriers to recognizing hazards that may affect the health and quality of life of people who live in communities believed to be at risk. Where necessary, based on assessments of hazards and exposure, conduct biologic testing of individuals believed to be exposed. This effort may result in the development and implementation of appropriate public health actions, based on demonstrated need, including actions recommended to prevent or reduce current exposures to toxic substances.
- Assess the potentially harmful impact on high-risk populations of exposure to key environmental hazards.
- Empower and educate the community about environmental hazards. Evaluate impact of educational efforts to ensure that health care providers familiar with the recognition and treatment of illness associated with exposure to environmental hazards.
- Enhance capacity building in state and local health departments, environmental departments, academic institutions, and community non-profit groups to address environmental public health issues associated with minority health.
- Through collaborative efforts with state regulatory agencies and other federal agencies, increase the awareness of the importance of environmental public health among students at Head Start Centers, other preschools, and primary through college-level institutions in the Delta region.

- Provide pollution prevention and health promotion education regarding exposure to environmental hazards
- Ensure that efforts occur that lead to enhanced community empowerment and involvement in addressing environmental public health issues.
- Identify and coordinate state and federal actions to address environmental health issues in Delta Region.
- Evaluate and disseminate the effectiveness of strategies to prevent health and environmental impacts of key environmental hazards.

Federal Science Managers' Conference on Environmental Justice Research

Project Description: This interagency project is proposed as a model participatory research planning conference involving senior federal

research managers, key stakeholders from at-risk communities, workers, and representatives from industry, academia, and state research agencies. Building upon the process and content of the Symposium on Health Research and Needs to Ensure Environmental Justice, this conference for FY 1995 will emphasize developing a sustainable environmental justice research agenda focused on central topics in Executive Order 12898: multiple and cumulative exposures and impacts; subsistence consumption of wildlife; involvement of people of color and low-income populations in epidemiological and clinical research; demographic and exposure-related research at federal facilities; more effective public involvement in research and the development of research strategies; and building a sustainable federal infrastructure to support environmental justice research.

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Environmental Epidemiology Health Effects of Ozone Perinatal Exposure to Dioxins

Environmental Health

perspectives

Supplements

This issue contains proceedings of three conferences/workshops:

The Fifth International Conference of the International Society for Environmental Epidemiology was held 15–18 August 1993 in Stockholm, Sweden, and was sponsored by the Karolinska Institute, the World Health Organization, the Swedish Environmental Protection Agency, and others.

The Symposium on Ozone Air Quality and Health Effects was held 27–29 May 1992 in Piscataway, New Jersey. Sponsors for the symposium were the NJ Department of Environmental Protection and Energy, the National Institute of Environmental Health Sciences, the U.S. Environmental Protection Agency, and the American Petroleum Institute.

The Workshop on Perinatal Exposure to Dioxin-like Compounds was held 13–15 June 1993 in Berkeley, California, and was sponsored by the U.S. Environmental Protection Agency, the California Public Health Foundation, the California Environmental Protection Agency and the National Institute of Environmental Health Sciences.

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