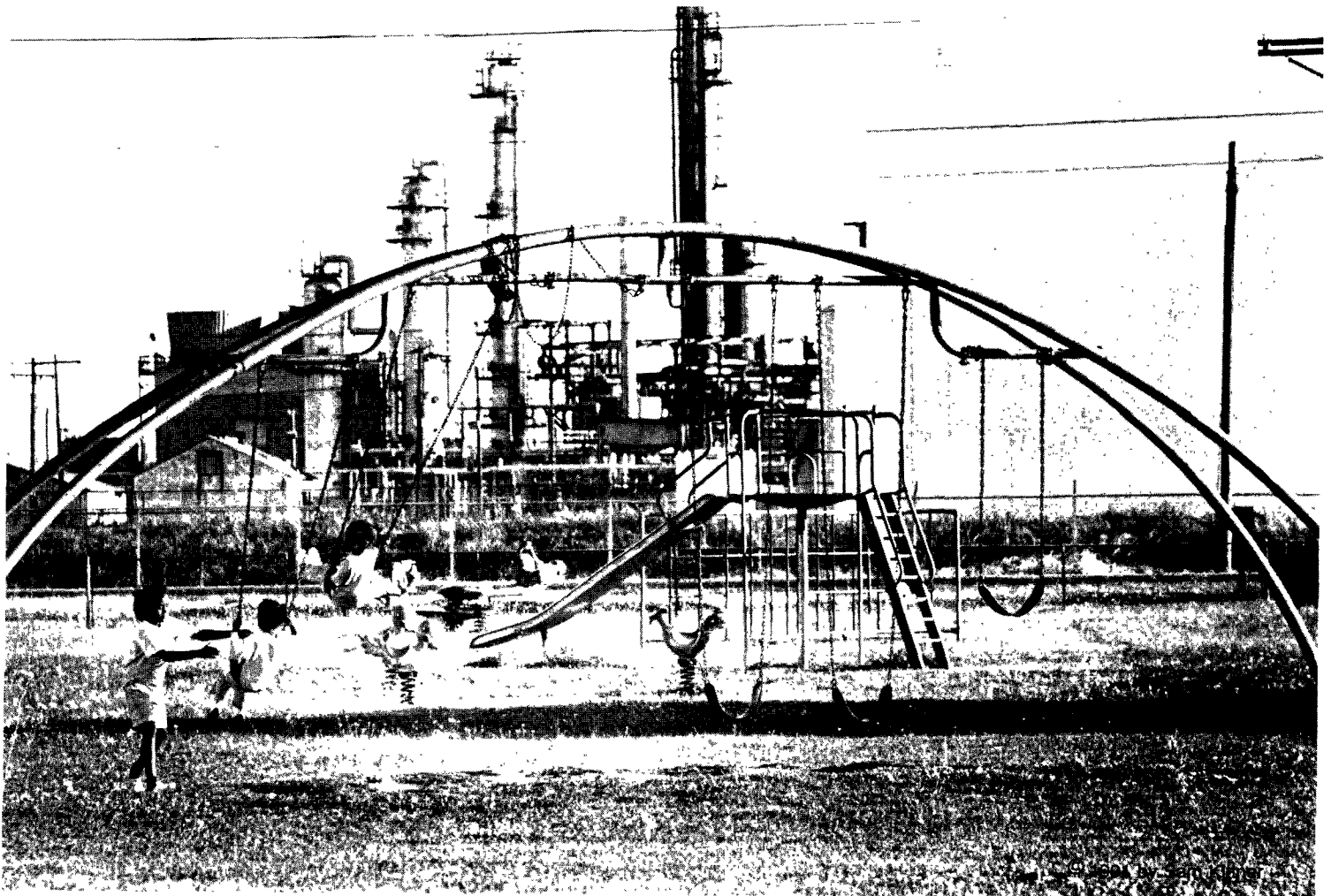




# Environmental Justice Initiatives

## 1993

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# The Environmental Justice Program At EPA

The Office of Environmental Equity was officially established on November 6, 1992 with a specific directive to deal with environmental impacts affecting people of color and low-income communities. The Office serves as the Agency's and public's point of contact for environmental justice outreach, technical assistance, and information. A separate senior executive committee, the Equity Cluster, was formed at the same time to develop the Agency's policies, guidance documents, and agenda for environmental justice. The Office and the Cluster worked in concert to frame the issues and develop broad directives.

Some regions have developed environmental justice policies, strategic plans and action plans. The strategic plans outline the region's commitment to ensure equitable environmental protection for all communities while the action plan provides managers and staff with a framework to develop and implement environmental justice efforts. Each region and program office initiated environmental justice workgroups, quality-action teams, advisory boards or steering committees to focus on and oversee environmental justice activities.

Individual "Ethnic Study Groups" made up of EPA volunteers were established to develop discussion topics and position papers on how environmental justice issues affect each ethnic group. Each EPA volunteer identified equity issues pertinent to the EPA program in which they worked.

To enhance communication with outside groups, particularly communities, the Office created several publications and other "access" vehicles:

- An Environmental Justice Hotline is open on 1-800-962-6215.
- The Environmental Equity Update Memo, a status report published several times a year, highlights agency environmental justice activities and initiatives.
- Equity programs are sponsored on ethnic radio and TV networks (i.e., Hispanic Network Radio and the Black College Satellite Network).
- The public's understanding of environmental justice is refined through interviews on public TV, technical advice to museum exhibits, sponsorship of booths at national conferences, and serving as advisors to university drama clubs on the creation of an environmental justice drama.
- Meetings were held with senior officials to discuss the concerns and listen to the suggestions of outside environmental justice leaders. The Agency is formalizing this input by establishing a Federal Advisory Committee on Environmental Justice.

All regional offices were encouraged to reach out to community groups, industries, state and local organizations to bring them together to discuss local environmental problems and decide on possible solutions. The Office sponsored several pilot symposia of this type to be used as national models.

The central office coordinated projects and shared environmental justice information across media offices by forming networks in all program and regional offices. Each of them has appointed an environmental justice coordinator.

## New Initiatives

In January, 1994, the Agency will initiate a new three-tiered environmental justice infrastructure to work with the Office of Environmental Equity. The structure will establish a new Executive Steering Committee, reconstitute the Equity Cluster as an Environmental Justice Policy Working Group, and strengthen the Environmental Justice Coordinators.

- The Executive Steering Committee, comprised of Deputy Assistant Administrators and Deputy Regional Administrators from at least three regions, will provide agency direction on strategic planning to ensure environmental justice is incorporated into Agency operations and to provide direction to the Policy Group.
- The Policy Working Group will ensure cross-media policy development and multi-media coordination of environmental justice projects and technologies.
- Environmental Justice Coordinators will continue to provide education and outreach for environmental justice information in their offices and regions.

The new structure is an effort to get a clear commitment from senior management to integrate environmental justice into their offices, continue to move away from our mandated single-media orientation to a multi-media, holistic approach to protecting public health and the environment, and provide communication and accountability mechanisms to ensure results.

## EPA's COMMITMENT

We at EPA are deeply committed to the principle of environmental justice: fair environmental protection for all people regardless of race, ethnic background or income status. We believe that EPA has the responsibility for coordinating the efforts and duties of the federal, tribal, state and local governments to provide a clean and safe environment for every resident, in every community, in the United States.

We now believe that the remedies we adopted to upgrade environmental quality during the past two decades have not benefitted all communities. People of color and low-income communities have alleged that they have a higher level of environmental risk than the majority population, especially in hazardous waste exposure, disposal, and containment. In fact, some of these communities do bear a disproportionate share of the nation's air, water, and waste-contamination problems.

We are committed to address these concerns and are assuming a leadership role in environmental justice initiatives in order to enhance the environmental quality for all residents of the United States. Incorporating environmental justice into "everyday" activities and decisions will be a major undertaking. Fundamental reform will be needed in the way we do business. We have begun by including environmental justice among the Agency's highest priorities in all programs, both at headquarters and in the regions. We are incorporating environmental justice initiatives into short-term and long-term planning processes, in regulatory and policy making activities, enforcement, pollution prevention, education and economic development strategies.

More than ever, businesses, communities, and federal, tribal, state and local governments are coming to realize the link among environmental justice, sustainable development, and community empowerment. To achieve environmental justice, it is critical that these parties work together to shift the direction of current policies. Environmental justice will require that managers, in conjunction with all stakeholders develop a sophisticated understanding of the environment itself. The opportunity is here -- let's seize it.

Carol M. Browner, Administrator  
U.S. Environmental Protection Agency  
January 1994

## ORIGINS

Many people of color and low-income communities have alleged that they suffer a disproportionate burden of health consequences due to over-siting of industrial plants and waste dumps, and from exposures to pesticides or other toxic chemicals at home and on the job. It appears that many of these communities are situated by unusually high numbers of industrial and waste facilities. Consequently, possible exposure levels raise concerns about the likelihood of rising cancer rates and other health effects.

One of the first reports to document the correlation among risk, race and income was the Council on Environmental Quality's (CEQ) 1971 Annual Report to the President. In this report, the CEQ acknowledged that racial discrimination adversely affected the ability of the urban poor to elevate the quality of their environment.

In 1979, Robert Bullard, while a sociologist at Texas Southern University, completed a report describing the futile attempt of an affluent African-American neighborhood in Houston, Texas to block the siting of a hazardous waste landfill nearby. He provided evidence that race, not just income status, was a probable factor in this local invidious land-use decision.

Environmental justice became a nationally recognized issue in 1982, when 500 demonstrators protested against the proposed siting of a landfill for polychlorinated biphenyls (PCBs) in a predominantly African-American and low-income community in Warren County, North Carolina. This targeting of an unwanted hazardous facility in a politically powerless black community was called "environmental racism" by the demonstrators. As a result of the Warren County protests, and his participation in these protests, District of Columbia Congressional Delegate Walter Fauntroy requested a U.S. General Accounting Office (GAO) study of hazardous waste landfill sitings in EPA's Region 4 (Georgia, Florida, Mississippi, Alabama, Kentucky, Tennessee, North Carolina and South Carolina). The 1983 study found that three of the four commercial hazardous waste facilities were in predominantly African-American communities and the fourth was in a low-income community.

In 1987, the United Church of Christ Commission for Racial Justice released a study which expanded the GAO study by including all regions in the nation. This finding determined that race, not income status, was the factor more strongly correlated to residence near a hazardous waste site.

In the early 1990's, two major environmental justice conferences were held: *The First National People-of-Color Environmental Leadership Summit* and *The University of Michigan School of Natural Resources Conference on Race and the Incidence of Environmental Hazards*.

The Environmental Leadership Summit was held in Washington, DC, in October of 1991. The Summit was organized by grassroots organizations and community activists who considered the struggle for environmental justice as a life-or-death matter for their communities. More than 650 participants adopted the "Principles of Environmental Justice," a platform calling for an end to the poisoning of low-income communities and people of color all over the world.

The University of Michigan held its conference, in January of 1990, in Ann Arbor, MI. One outcome of this conference was the formation of the Michigan Coalition: a group of social scientists, civil rights leaders, and environmentalists interested in making environmental justice a public-policy issue. The Coalition sent a letter to the EPA Administrator requesting Agency action on environmental risks in communities of color, low-income neighborhoods, and on Tribal lands.

In response to the concerns of the U.S. Congressional Black Caucus and the Michigan Coalition, EPA formed the Environmental Equity Workgroup. The Workgroup, comprised of a cross-section of senior EPA staff, reviewed and evaluated the evidence that low-income and people of color communities bear a disproportionate environmental risk burden. The Workgroup's findings were reported in a two-volume report titled *Environmental Equity: Reducing Risk in All Communities*. In summary, the report found that:

- There are clear differences between racial groups in terms of disease and death rates; however, there is a general lack of data on environmental health effects by race and income. The notable exception is lead poisoning. A significantly higher percentage of African American children, compared to white children, have unacceptably high levels of lead in their blood.
- People of color and low-income populations experience higher-than-average exposures to selected air pollutants, hazardous-waste facilities, contaminated fish, and farm pesticides in the workplace.
- Data are not routinely collected on health risks posed by multiple industrial facilities, cumulative and synergistic effects, or multiple pathways of exposure.
- American Indians are a unique ethnic group with a special relationship to the federal government and distinct environmental problems. Tribes generally lack physical infrastructure, institutions, trained personnel and resources necessary to protect their members.

As recommended by the Workgroup, the EPA created the Office of Environmental Equity to coordinate the Agency's efforts to address environmental justice issues. The Office serves as the focal point for environmental justice concerns at EPA and oversees related activities throughout the Agency. [See box inside the front cover.]

## **EPA RESPONDS**

Because of the scarcity of scientific information and criteria to help define disproportionate impacts, exposures, and nexus, EPA must re-evaluate its existing policies to ensure that environmental justice activities are integrated into all of its programs and operations. From Superfund's administrative improvements, the reauthorization of CERCLA and the Clean Water Act, to the internal reorganization and focus on enhancing the Agency's enforcement function, positive changes are occurring. We expect that the direct beneficiaries of these activities will be the communities of color and low-income populations. A number of these programs are already ongoing, but in their infancy, and will require more time to be fully implemented.

### **Gathering Information**

To determine whether people of color and low-income communities are being subjected to disproportionate siting of facilities that generate hazardous substances, the Agency is utilizing advanced computer methodologies or devising new ones to carry out data searches for more comprehensive evaluations of existing exposure patterns. Geographic analysis to develop information describing populations that live near hazardous waste sites, including both National Priority List (NPL) and non-NPL sites, commercial hazardous waste disposal facilities and RCRA corrective action sites are underway. Many of the EPA Regions, particularly Region 2 (Boston), Region 3 (Philadelphia) and Region 6 (Dallas) have already put in place capabilities which allow them to access and analyze demographic data more accurately for identification of potential environmental justice situations.

For example, Region 2 is conducting a Geographic Information System (GIS) analysis to test methods of identifying areas of potential concern in the region based on factors such as facility location, population density, income and ethnicity. The GIS pilot uses New Jersey census block data with Toxic Release Inventory (TRI) emission-source data to test the methodology. The material is being used in siting, enforcement and monitoring decisions.

### **GIS Conference**

A National Environmental Justice/Geographic Information Systems Forum for EPA national and regional program managers was held in October 1993. The forum brought environmental justice policy makers and technical experts together to open lines of communication. This will lead to effective use of state-of-the-art data-management tools in analyzing demographic data for environmental justice impacts. The ultimate goal is to develop consistent and credible GIS methodologies for use in environmental justice analyses.

## **GIS Air-Emissions Analysis**

Under the Clean Air Act and as part of the Urban Area Source Program, the Office of Air and Radiation is continuing a series of urban studies identifying risks to populations from aggregate exposures to many air toxics. The studies evaluate cancer and non-cancer health endpoints at numerous urban locations and include many parameters such as source type, proximity of people to sources, and magnitude of exposures to multiple pollutants. The studies allow an assessment of particular population groups that suffer from the highest levels of risk. Overlaying risk-distribution patterns from these studies with socioeconomic statistics, available from census data, gives some sense of differential risks seen by various population groups. This type of analysis provides an indication of unequal risks related to urban sources of toxic emissions.

For instance, Region 6 is conducting an analysis along the Industrial Corridor between Baton Rouge and New Orleans, which includes ten parishes (counties) with over 150 manufacturing facilities, many of which report under the Toxics Release Inventory. The area is interspersed with people of color and low-income communities. The analysis indicated that total on-site releases and transfers to off-site locations from facilities in several of the parishes were relatively high compared to other U.S. counties. Releases in the Industrial Corridor are declining, however, at a rate higher than the average for the U.S. A GIS analysis found that populations within two miles of facilities releasing 90 percent of the area's total air emissions had a higher proportion of people of color than the state's average.

The analysis has been cited in several reports on environmental justice issues in Louisiana, most notably the report of the Louisiana Advisory Committee on Civil Rights entitled "The Battle for Environmental Justice in Louisiana ... Government, Industry and the Public."

## **GIS Used in Targeting Lead in Communities (GIS-TLC)**

The Office of Prevention, Pesticides, and Toxic Substances has initiated a risk-based geographic targeting system for lead exposure using the GIS. Initial studies were aimed at identifying predictive variables by comparing housing and socioeconomic characteristics with elevated blood levels of the population undergoing the study. The Agency hopes the targeting information can be used by states and regional offices for the assessment of lead risk in high exposure communities in major metropolitan areas. As an application of GIS-TLC, Region 9 (San Francisco) is using the lead-targeting system in Alameda County, California. Alameda's high level of community awareness, availability of data, and convenience to the regional office for on-site inspection, made it an ideal area for GIS-TLC mapping. Maps produced show specific areas where Hispanic children living below the poverty line, with a female head-of-household, appear to have the highest probability of elevated blood-lead levels among children up to six years of age. The next step is to acquire blood-lead test data to confirm these findings.

## **Future GIS Directions**

EPA's GIS capabilities do not now include the full range of data needed to conduct valid analyses everywhere. EPA has proposed an initiative which would include the development of an expanded set of GIS-analysis tools and data, together with grants for pollution prevention actions in areas with environmental justice concerns. As part of this proposal, the GIS tools and data would be made available to interested groups to use in conducting local analyses. If funded, this proposal will expand the public's role in TRI reductions to foster targeted pollution prevention. Using the grants, local governments and community groups could address a wide range of toxic chemical concerns by focusing on reducing or eliminating the use or generation of the substances.

## **Health Risks To Communities**

An important aspect to advancing environmental justice is the need to ascertain whether racial and ethnic minority populations are: exposed to a greater burden and higher frequency of multiple chemical exposures; more susceptible to the effects of environmental pollution; and adequately protected by current health-risk-analysis methods taking these factors into consideration. Economically disadvantaged and some ethnic populations tend to have a higher incidence of cancer and other health effects. Chronic, low-level exposures to hazardous substances faced by these communities suggest the health consequences of these impacts are more severe. The Agency is examining this threat more closely.

## **Diet and Eating Habits**

EPA has begun to link health risks, pesticides, and diet as an environmental justice issue. One can no longer assume that people of different ethnic background and income levels eat the same kinds and amounts of food as presumed in some studies. Environmental justice requires that the role of culture, ethnicity, and income-related factors in dictating eating habits must be explored when setting pesticides tolerances and other standards for food.

We've known for some time that certain populations (e.g., recreational and subsistence fishers, American Indians, Asian-Americans, and low-income populations) have higher fish consumption rates than the 6.5 grams/day used in the national water-quality-criteria guidance for human health. The 6.5 grams/day rate equates to roughly one of fish meal per month. Tribes in the Northwest have been particularly alert to the discrepancies found between their traditional cultural practices and the 6.5 grams/day rate. Alaskan fish consumers have become alarmed by use of the 6.5 grams/day consumption rate to protect Alaskan waters, as the level may harm their health, and threaten their way of life.

The 6.5 grams/day rate was derived from data on both consumers and non-consumers of fish from fresh and estuarine waters throughout the United States. There is fairly broad agreement that this number is an underestimate and out of

date. At national EPA workshops (e.g., a tribal water quality standards workshop held in Denver in March 1992) and in comment letters on proposed water quality standards for Alaska, EPA has encouraged the recalculation of human health criteria using more appropriate fish consumption rates.

In efforts to help this recalculation, Region 9 (San Francisco) and Region 10 (Seattle) have started a cooperative project to survey fish consumption levels in Asian American populations. People of this culture consume large quantities of fish and other seafood and the results of this work could greatly impact the development of more relevant water quality criteria.

Similar studies have been ongoing in American Indian populations for several years. A survey of the Umatilla, Ney Perce, Yakima and Warm Springs Tribes of the Columbia River Basin has been conducted by the Columbia River Inter-Tribal Fish Commission. The study, which assesses the consumption rate of fish by tribal members, the species of fish consumed, fish preparation methods, and the source of the fish, is to be published later this year.

### **Comparative Risk Analysis**

The Office of Policy, Planning and Evaluation is currently assisting several cities in executing comparative risk projects (i.e. a process of ranking environmental problems by priorities). The objective is to identify the relative risks posed by environmental problems in a given area and to develop credible and realistic action plans for mitigation. An environmental justice analysis within the comparative-risk analytical framework is being developed to adequately identify communities and sub-population groups at risk. These analyses require a re-examination of risk assessment assumptions based on hazard identification and exposure.

The Hawaiian Department of Health has implemented a comparative-risk project to identify and assess environmental problems facing Hawaiian residents. Two environmental justice issues are being addressed in the project. First, the effects of environmental impacts on the quality of life are being assessed with a specific emphasis on native Hawaiian culture, because it is closely tied to the environment. Second, the health effects of any increased exposure to environmental contaminants are being assessed for native Hawaiian communities living at the subsistence level.

Eleven tribes in Wisconsin released a report this year entitled "Tribes at Risk: The Wisconsin Tribes Comparative Risk Project." This completed the first phase of Region 5's (Chicago) joint comparative risk project with the Tribes. Since then, Tribal environmental programs throughout the Region have worked closely with Region 5 in the second phase, risk communication, to improve the information on risks and to begin risk-based dialogues with other tribes and federal agencies. The project was a major catalyst for the 1993 Tribal Environmental Summit.

Region 3's (Philadelphia) Urban Environmental Risk Initiative is a geographic initiative aimed at identifying, ranking, reducing, and preventing environmental

risks in large metropolitan areas. Baltimore, Maryland and Washington, DC were selected as pilot areas. The Initiative is intended to serve as a model to be applied to urban areas across the country. This Initiative not only defines and resolves urban environmental problems, but can characterize and target environmental justice problems associated with urban areas. In a cooperative effort, EPA, the target cities, and other participants are using existing data to complete environmental risk ranking; identify sub-geographic problem areas; develop and implement effective risk communication to educate effected communities; and develop and implement risk-reduction activities.

### **Health Assessment Studies**

The National Human Exposure Assessment Survey (NHEXAS) currently being developed by EPA's Office of Research and Development, is designed to generate a human exposure database to address some of the geographic and demographic questions relevant to the issue of environmental justice. NHEXAS will address the exposure-based component by providing information on the magnitude, extent, and causes of human exposure. This program will be important in providing information essential to making informed decisions about environmental health risks in high risk communities.

The Office of Policy, Planning, and Evaluation is currently developing an environmental justice database which will integrate health-effects data from the National Health and Nutrition Examination Survey III (NHANES-III), demographic data from the 1990 Census, environmental data from air monitoring stations and the Toxic Release Inventory database. This database integration will assist EPA staff in developing disease correlations with air-exposure data in high impact populations.

EPA, in conjunction with the U.S. Public Health Service, designed the Lower Rio Grande Valley Environmental Study to investigate human exposures to environmental contaminants along the U.S./Mexico border. This work began as a result of reports of increased rates of fetal brain defects in Brownsville, Texas and Matamoros, Mexico. The sources of contamination and identification of the pathways of exposure are expected outcomes.

In other health-effects studies, Region 2 (New York) received several requests to investigate reported health problems in the municipality of Catano, Puerto Rico. Residents complained of high rates of cancers of all types as well as incidence of pediatric asthma higher than anywhere else in the world. These health statistics were attributed to power-plant emissions and other industrial pollutant releases in the area. The Region took environmental samples, conducted intensive inspections of facilities in the area and took expedited enforcement actions. The Center for Disease Control and Region 2 arranged to have an asthma study conducted and the Puerto Rico Department of Health established a special health study group for the area, including citizen representatives.

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## **Health Effects Conference**

An interagency symposium on "Health Research and Needs to Ensure Environmental Justice" scheduled for February 10-12, 1994, will develop constructive communication among key stakeholders (e.g., effected communities, tribes, regulators, scientists, elected officials, and others), in order to develop research programs aimed at filling data gaps in several critical areas (health, exposure, prevention, intervention). The symposium will also focus on the development of new methods to better identify areas and communities where environmental justice issues arise and to design effective prevention and intervention strategies.

## **Public Participation And Decision Making**

### **Superfund Administrative Improvements**

EPA is committed to increased public participation at an earlier stage in the process of siting decisions for hazardous and solid waste facilities. Administrative improvements made by EPA in June 1993 included efforts to enhance public participation and the effectiveness of Superfund cleanups in communities of color and low-income populations. So far, the Agency has surveyed its regions and has identified more than 20 environmental justice pilot projects that will allow the agency to experiment and provide the basis for substantive policy development.

### **Superfund Reauthorization and Policy Changes**

EPA is considering environmental justice in the context of the Superfund reauthorization process. Discussions on reauthorization have yielded a high level of public involvement on matters of concern to environmental justice advocates and other stakeholders. The Administrator has requested the formation of a working group under National Advisory Committee on Environmental Policy and Technology (NACEPT), to address these concerns. On the basis of the working group's proposals, the Agency is considering changes to the Hazard Ranking System (HRS) which would give cleanup priority to Superfund sites located in neighborhoods burdened with multiple environmental stressors--primarily people of color and low-income communities.

## **Targeted Enforcement Inspections And Compliance Monitoring**

### **Enforcement and Compliance Monitoring Activities**

Historically, the Agency has pursued violations of environmental laws on a statute-specific basis. Cases were filed alleging failure to comply with only a single environmental law. The Agency is now emphasizing a multi-media approach, in which it looks at all of the environmental problems presented by a particular facility or geographic area alleging violations of more than one statute in a single

action. The Agency is also devising strategies to target inspections, enforcement actions, and compliance monitoring in communities that are exposed to multiple environmental hazards.

For example, Region 5 (Chicago) has heightened its scrutiny of facilities in the highly industrialized area of southeast Chicago and northwest Indiana, where industry has contributed to severe surface-water and groundwater degradation and to the chronic air pollution problems. This area, comprised of mostly low-income and people-of-color communities, is being targeted for multi-media inspection, compliance monitoring, and enforcement initiatives.

Region 10 (Seattle) recognized the importance of a targeting system for facilities in their region scheduled to receive an EPA multi-media inspection. For some time, it has been the Region's goal to increase emphasis on multi-media activities and focus on those facilities objectively posing the greatest risk to the environment. The Region's targeting workgroup succeeded in creating a precedent-setting targeting protocol to accomplish these goals. Environmental justice considerations have been factored into the screening criteria and are part of the decision-making process.

In efforts to effect internal change, Region 6 modified its annual multi-media enforcement and inspection-targeting strategy and procedures to include an environmental justice component. The factors to be weighted equally in the annual targeting process include environmental justice; human health risk; historically significant non-compliance with the environmental statutes; current EPA enforcement program input; state input, and current national, regional and program specific-enforcement initiatives.

Federal facilities are often overlooked for compliance with environmental laws, despite their sometimes low rate of compliance. The 1994 federal facilities multi-media enforcement/compliance initiative involves targeting high-priority facilities for inspections and follow-up enforcement. Environmental justice is one of the key ranking factors for selecting facilities for enforcement inspections.

### **Settlements and Fines**

Last March Region 5 achieved a settlement with Inland Steel Corporation for violations of the Clean Water Act, RCRA, the Clean Air Act and the Safe Drinking Water Act; the company agreed to \$3.5 million in penalties, a \$19 million project to clean up contaminated sediments that threaten Lake Michigan, and \$7 million in future supplemental environmental projects. In June, EPA filed suit against a Sherwin-Williams paint-manufacturing plant in the same corridor for violations of RCRA, the Clean Air Act, and the Emergency Planning and Community Right-to-Know Act. Both of these facilities are located near large people-of-color and low-income communities.

## **Supplemental Environmental Projects (SEPs)**

A key aspect of using enforcement as a tool to help reduce the heightened risks borne by certain communities is the implementation of Supplemental Environmental Projects (SEP's). In the past, EPA has insisted upon recovering in cash the economic benefit that any company gained through non-compliance with environmental laws. But under the SEP policy, EPA can reduce penalties achieved from above the economic benefit level in exchange for enforceable agreements to complete environmentally beneficial projects that go beyond the injunctive relief that EPA can order--projects that promote pollution prevention, pollution reduction, environmental restoration and environmental auditing.

While SEPs are complex, they offer the Agency an opportunity to deal creatively with problems of communities that have legitimate environmental justice concerns. The Office of Enforcement is working with the Department of Justice to identify those cases in which SEPs may offer a partial solution to these problems.

## **Civil Rights Act Enforcement**

Under separate enforcement authorities, EPA's Office of Civil Rights received and accepted for processing two complaints alleging racial discrimination under Title VI of the Civil Rights Act of 1964. Title VI prohibits discrimination on the grounds of race, color or national origin in programs or activities receiving Federal financial assistance. The Title VI regulations and environmental statutes themselves provide EPA with the authority to promote environmental justice policies. One of the complaints involves a permit application for a hazardous waste treatment and storage facility in Iberville Parish, Louisiana. The other complaint, filed by African-Americans for Environmental Justice, involves permit applications for several facilities in or near Noxubee County, Mississippi.

Both complaints are in the discovery stage, information is being collected and analyzed from a variety of sources as the first step in the investigations. The next step of the complaint processing procedure provides for conciliation efforts to settle complaints. If the complaints are not settled, the Agency will complete the investigations and take action.

## **Outreach And Education**

Environmental information must be readily available and understandable by the public. Materials must be developed to keep the public fully informed of EPA rulemaking, enforcement actions, risk assessments and other relevant activities. To help boost environmental awareness and acceptability by communities, EPA has taken important initiatives. To enable communities, organizations, and institutions to better understand environmental activities, and to pursue environmental protection alternatives in a systematic, long-term effort.

In order to institutionalize environmental justice the Agency has formed partnerships with other groups and provided financial assistance and outreach to people of color and low-income communities using more effective means of

communication and education. It is critical that information on environmental hazards be communicated to citizens independently of educational level and language, so that communities can become empowered to make their own environmental decisions. One of EPA's environmental justice goals is to ensure that no segment of the population carries a disproportionate burden of pollution, especially not as a result of being uninformed.

Education programs are essential to the successful implementation of programs to mitigate instances of environmental injustice. The public needs to be aware of environmental issues and rights and responsibilities under environmental laws. Communities must be aware of the ability to share in the potential economic benefits to be realized through pollution prevention programs, preventive-exposure programs, remediation programs, community restoration projects, etc. Training programs can be conducted via public meetings, symposia, workshops and seminars conducted by churches, schools, colleges, universities and community organizations. Program and regional offices have devoted much of this first year to devising training programs, hosting conferences and workshops, and building partnerships to focus on identifying environmental justice problems and determining possible solutions.

Opportunities to obtain environmental education should be provided on an institutional basis as well as by informal means. EPA believes that all levels and segments of the population can benefit from information that can help them focus on the essence of environmental issues. Environmental managers are learning to become better decision-makers by gaining an appreciation of risks, socio-economic impacts and benefits, and environmental justice. For instance Region 10 (Seattle) conducted a risk-based environmental decision making conference for residents in the States under its purview. This day-and-a-half conference explored the use, limits and value of risk-based environmental-decision-making. The conference targeted policy makers; environmentalists; scientists; federal, state and local officials; attorneys, health care providers; business leaders and members of ethnic/minority and rural communities. Discussions centered on the process of environmental risk-based decision-making and the challenge of addressing broader social concerns such as justice, prosperity, and safety.

In addition, EPA must target the low-income and people-of-color communities, affording them with greater opportunities to understand the principles of environmentalism, community rights, and the needed training to help reduce environmental risks in their communities. The goal is to bring a fresh perspective to the understanding of environmental risks so that each community can make informed decisions by exercising their rights in all phases of environmental decision-making.

For example, the Office of Solid Waste and Emergency Response (OSWER) and the National Association for the Advancement of Colored People (NAACP) are working in partnership to examine the health risks presented by certain inactive or uncontrolled waste sites located in or near people-of-color and economically disadvantaged communities. In this prototype, teams of experts will be established

to go into the selected communities, survey residents, and develop strategies to resolve health and environmental issues. These experts will examine community participation in the Superfund process and they will seek the reasons for it or lack of involvement by the community. The NAACP will make a report of the findings and recommendations available for community use. Ultimately, the project will provide a means to strengthen community participation earlier in the Superfund process.

EPA has initiated a number of environmental programs which formalize the training and provide "hands on" experience for students at the undergraduate level. Through educational grants, EPA has provided summer employment opportunities for students at governmental agencies nationwide. This past summer, 23 Morgan State University undergraduates were matched with appropriate EPA projects for the summer. This arrangement gives the students professional experience and will hopefully create an interest in pursuing a career in environmental fields.

A cooperative agreement was also initiated with the Environmental Careers Organization (ECO) to help the Agency attract summer interns to work for federal, state, local and tribal government environmental agencies. Students from the nation's historically black colleges and universities, The Hispanic Association of Colleges and Universities, and various tribal colleges were selected to train in environmental protection.

Region 7 (Kansas City) had a number of environmental education programs targeted at American Indians. For example, the region has 1) awarded to Haskell Indian Junior College an environmental education grant that will support their GIS program; 2) provided support for a science camp for American Indian students; 3) ran workshops for science and math teachers of American Indian students; and furnished copies of an Environmental Curriculum Guide and offered training in its use to teachers of American Indian students.

Other EPA educational and outreach programs included training of inspectors, workers and local residents of ethnic communities on such issues as emergency planning and community right-to-know, lead abatement, risk reductions of hazardous materials, well-head protection of water resources, and pesticide exposures. Two important areas to which EPA devoted much attention are lead abatement programs and the adoption of new guidelines for the protection of consumers and workers exposed to pesticides.

EPA has organized conferences and workshops which aim at providing short-term training to both technical personnel and the affected general public on specific environmental or environmental-justice issues. Manuals, fact sheets, or other printed materials in the appropriate native languages are provided to attendees and residents of local ethnic communities.

The Colonias Project, formed under the EPA U.S./ Mexico Integrated Border Environmental Plan, is a multi-agency group, chaired by EPA Region 6, to deal

with border-area environmental issues. Region 6 hosted five workshops in the border area of Texas through the Texas Colonias Sub-Group. The objectives of the five workshops were to provide information to the residents and to address questions regarding water supply and wastewater-treatment financing in the colonias.

### **Lead Abatement and Pesticides Worker Protection**

Under the Lead-based Paint Hazard Reduction Act, EPA's Office of Prevention, Pesticides and Toxic Substances is working with the Agency for Toxic Substances Disease Registry and the Department of Housing and Urban Development on a number of public awareness and educational activities. The National Lead Information Center (NLIC) was formed in April, 1993 to provide lead-poisoning information to the general public. In 1993, more than 40,000 calls were received by the NLIC. During this time, the NLIC also sponsored two public meetings in Newark and Chicago to discuss lead-poisoning prevention and abatement strategies. Separately, a national public service advertising campaign with the National Safety Council was put together to heighten the public's awareness on the dangers of lead poisoning in children through printed materials, television and radio advertisements in both English and Spanish.

For three years EPA has funded grants to non-profit groups to deliver lead-abatement-worker training. Seven grants were awarded to groups located in low-income communities to recruit and train qualified unemployed community residents to be lead-abatement workers. The training includes both classroom studies as well as an extensive apprenticeship where lead abatement work is actually performed on homes in the community. This on-the-job training provides free labor to home owners who could not otherwise afford to eliminate lead hazards. Special emphasis is placed on teaching a portion of the class supervisory skills to improve their future employment opportunities in the lead abatement field. In addition, carpentry and other related skills are taught at the same time.

It has been estimated that as many as 300,000 cases of pesticides poisoning occur each year among agricultural workers. In August, 1992, EPA published new standards for protection from the hazards posed by pesticides for this group. With the assistance of affected interest groups, the Office of Pesticide Programs (OPP) has developed a number of outreach and informational materials designed to help agricultural employers understand their responsibilities to their workers, better prepare state agencies and tribal governments to enforce the new standards, and provide safety information to workers. OPP has begun to work with the Association of Farmworker Opportunity Programs (AFOP) to develop outreach and education material, and with the Rural Community Assistance Program (RCAP) to identify and refine training methods that could be effective in educating workers on the dangers of pesticides. These efforts included translation of materials into other languages and training taught in appropriate languages. Announcements in Spanish were made on the National Hispanic Radio Network.

Region 8 (Denver) has a Tribal Pesticide Enforcement Program aimed at field-worker protection, pesticide applicators, and groundwater protection. The region is currently providing funding and assisting in implementing five programs using grants to provide training and technical assistance to Standing Rock, Pine Ridge Reservation, Rose Bud, The Three Affiliated Tribes (Fort Berthold) and Cheyenne River reservations. This program helps tribes to develop enforcement programs, including hiring inspectors, certification of pesticide applicators, and establishing worker-protection regulations and codes.

### **Community Assistance**

This year the Office of Environmental Equity developed a new community assistance grant program for groups dealing with local environmental justice projects. The program, to be administered by the regional offices, will provide financial assistance to community groups and tribes engaged in environmental justice issues. This first year's program will award amounts up to \$10,000 per grant to conduct projects such as socioeconomic impact studies, organize natural resource clean-up efforts, develop or supplement community newsletters, hold environmental justice workshops, access environmental public databases, etc.

The Office of Solid Waste and Emergency Response has simplified and streamlined the Superfund Technical Assistance Grant application package. The modified version is to make the application more accessible to community groups. Information about applying and managing the grant is available in four user-friendly booklets which can be requested as needed, instead of the one-inch thick stack of loose paper previously provided. Focus groups to test the effectiveness of these changes are planned.

### **Innovative Programs**

Some program and regional offices are developing creative ways to inform and involve the public in environmental initiatives that will impact their communities. The following are a sampling of those projects.

Region 10 in conjunction with the City of Seattle has established a Master Home Environmental Program which is designed to reduce exposures from toxic materials and pollutants in the home. The focus is indoor pollutants including lead, contaminated soil, toxics in house dust, hazardous household chemicals and pollutants from smoke and tobacco products. A group of Health Department nurses are working with low-income families in the Women, Infants, and Children (WIC) program, and provide information on home toxics and lead to the people they visit in the WIC program. The program targets communities with higher populations of people of color and low-income residents and relies on volunteers, many from the targeted communities. Volunteers who successfully complete the training then present this information to community groups and organizations, and assist people in implementing a survey for pollution problems in their homes.

Region 6 (Dallas) has created a First Responder Training for residents. Training is scheduled throughout the year for first responders to hazardous material accidents. This training provides for effective management of those accidents to prevent harm, when possible, to human lives and the environment. During this year, courses have been offered in the five states of Region 6, including bilingual training in the lower US/Mexico border areas and on Native American lands in New Mexico and Oklahoma.

Region 1 (Boston) sponsors an annual event that promotes youth interest in the field of environmental science. This past summer youths worked with zoo keepers, participated in horticultural projects and worked on a wetlands-restoration activity. The students also worked on a water-quality-monitoring project in the park and were exposed to a variety of environmental speakers and scientists. As a follow-up to this program, the region also works with YouthBuild Boston, a training program in Boston which provides young adults between the ages of 18 and 24 carpentry and vocational skills in addition to assisting students in completing their G.E.D. requirements. The objective of this program is to heighten awareness of the health risks associated with urban pollution and to encourage community involvement in remediation efforts. Regional Laboratory employees have volunteered their personal time to teach students data gathering techniques such as soil testing, measuring and sampling. Students then use their newly developed skills to work with soil-remediation specialists in cleaning up a lead-contaminated lot in their community. Once the lot has been cleaned, YouthBuild students use their carpentry and building skills to create playgrounds for neighborhood children.

In Region 4 (Atlanta), the OEA has supported Clark Atlanta University's development of an environmental curriculum to enable students to get "hands on" environmental experience while still in college. The Region, working with Clark, is establishing a mobile air toxics laboratory and air-monitoring station and will provide classroom presentations on monitoring technologies and methods.

In partnership with Morgan State University, EPA conducted a two-week environmental teachers institute. Forty teachers were recruited from low-income and culturally diverse communities where hazardous waste issues are of local concern. The teachers heard national experts speak on topics ranging from toxic waste and race to environmental technologies of the future. The 1993 institute was a national pilot and will be adopted in some EPA regions in 1994.

## **Sustainable Development**

EPA believes that all communities deserve to be as free as possible from adverse environmental impacts. If this goal is to be reachable it must be accomplished through the integration of environmental health and ecosystem protection and sustainable economic development. In addition, intra- and inter-generational equity (environmental justice now, equity for future generations and consideration of cultural heritage) must be attained.

EPA defines "sustainable development" as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. This means improving the quality of human life, while living within the carrying capacity of supporting ecosystems. Sustainable development is dynamic and implies the interplay of four dimensions: economic, human, environmental, and technological. EPA has begun to communicate the importance of environmental justice and sustainable development to communities, organizations and institutions. Funds are also being made available to minority and low-income communities to develop model sustainable-development projects.

In its efforts to empower communities to embrace sustainable-development, EPA has supported "self help" and financial-assistance programs in people-of-color and low-income areas. These programs are meant to stimulate economic growth through efforts to train and employ the unemployed and create businesses while cleaning the environment. The projects encompass lead and asbestos abatement, recycling, and environmental restoration.

The Office of Environmental Equity in conjunction with the Office of Small and Disadvantaged Businesses and Region 1, has developed environmental justice/economic development projects in Washington, D.C. and Boston. These projects seek to provide economic development opportunities for unemployed residents of public housing, while reducing a significant environmental risk (i.e. lead exposure to children). The aim is to train unemployed minority and low-income persons guarantee them employment; help create small businesses as employers and abate an environmental problem causing significant risk in the community. To accomplish these goals, EPA signed a Memorandum of Understanding with the Department of Housing and Urban Development (HUD), Department of Commerce (DOC), and the District of Columbia Government. In Boston, EPA signed with HUD, Roxbury Community College, Community Development Centers, and Boston's Public Facilities Department.

The Office of Solid Waste and Emergency Response has a model remediation/redevelopment project underway in Ohio. The Brownfields Redevelopment National Pilot Project is the prototype for a major national initiative between EPA, the State of Ohio and the Cuyahoga County Planning Commission in Cleveland, Ohio. The project will stimulate economic redevelopment of contaminated, abandoned urban areas through environmental cleanup.

Another example, of a different type, is the Mercado Project in Oakland, California, which is developing a public education center and small business incubator for retail outlets and related manufacturing/assembly facilities. These facilities will produce and sell high value-added products using recycled materials as a feedstock. California State University, Hayward, is preparing a business-management-training program and business plan for the Asian-American community in the San Francisco Area. The Mercado Project will train and employ people

from a culturally diverse community. Specifically, unemployed residents will be trained to convert recyclable wood and plastic into furniture.

In other areas, Congress has continued to fund the lead-worker-abatement grants program to recruit and train qualified unemployed community residents to be lead-abatement workers in their own communities. Seven groups, including The Salvation Army, Bronx Legal Services, and Baltimore Jobs in Energy, who offered this type of training and services to low-income communities, shared \$500,000 from EPA's 1993 resources.

A Project Matrix is available which contains a complete list of all project activities undertaken by EPA during the past year. To obtain this information, write to:

Environmental Justice Projects Matrix - 1993  
U.S. EPA (Mail Code 3103)  
Office of Environmental Equity  
Washington, DC 20460.