

United States Environmental Protection Agency

Environmental Justice 2000 Biennial Report:

Continuing to Move Towards
Collaborative and
Constructive Problem-Solving



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Office of Environmental Justice

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Annual Reports

- Environmental Justice Initiatives 1993 (EPA 200-R-93-001)
- Environmental Justice 1994 Annual Report Focusing on Environmental Protection for All People (EPA/200-R-95-003)
- Environmental Justice: 1996 Biennial Report Working Towards Solutions (EPA/300-R-97-004)
- Environmental Justice: 1998 Biennial Report: Moving Towards Collaborative and Constructive Problem-Solving (EPA 300/R-00-004)
- Environmental Justice: 2000 Biennial Report: Continuing To Move Towards Collaborative and Constructive Problem-Solving (EPA 300/R-01-005)

ENVIRONMENTAL JUSTICE 2000 BIENNIAL REPORT:

Continuing To Move Towards
Collaborative and
Constructive Problem-Solving

Prepared by
Office of Environmental Justice
Office of Enforcement and Compliance Assurance
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PREFACE		v
INTRODUCTION	· · · · · · · · · · · · · · · · · · ·	vii
CHAPTER 1:	Environmental Justice at the Federal Level	1
White House C	Council on Environmental Quality	1.2
	orking Group on Environmental Justice	
	Federal Interagency EJ Action Agenda	
Demonstrat	tion Projects	1.4
Highlights	of Projects	1.5
Completed	Projects	1.6
Other Interager	ncy Cooperation Effects	1.7
National Enviro	onmental Policy Act Implementation	1.10
CHAPTER 2:	Addressing Environmental Justice Problems	2
Lead Problems	and Solutions	2.1
Permit Problem	ns and Solutions	2.5
Pesticide Probl	ems and Solutions	2.6
Persistent Bio-	Accumulative Toxins Problems and Solutions	2.9
Fish Contamina	ation Problems and Solutions	2.9
Drinking Water	r Problems and Solutions	2.12
	Animal Feeding Operations Problems and Solutions	
	vith Multiple Problems	
Children's Hea	Ith Problems and Solutions	2.16
	Address Problems and Find Solutions	
Tribal Efforts t	o Address Problems and Find Solutions	2.24
	es Problems and Solutions	
	nental Environmental Projects	
	pute Resolution	
	rdous Waste Sites/Brownfields Cleanup Problems and Solutions	
	roblems and Solutions	
Mexican Borde	er Problems and Solutions	2.34
CHAPTER 3:	Public Participation and Training Initiatives	3
Public Participa	ation Initiatives	3.1
1	Justice Training Activities	
	vironmental Justice Training	
Tribal Training		3.5

CHAPTER 4:	Outreach Initiatives	4
Outreach		4.1
Tribal Consult	tation	4.5
International C	Outreach	4.6
CHAPTER 5:	Assessment Methodologies, Assessment Guidance, and Community	
	Assessments	5
Assessment M	lethodologies	5.1
Community/Si	ite Specific Assessments	5.3
CHAPTER 6:	Targeting, Environmental Health, and Exposure Studies	6
Targeting Studies		6.1
	1 Health Studies	
	lies	
APPENDIX. FI	PA Environmental Justice Coordinators	Д1

The Environmental Protection Agency (EPA) is firmly committed to integrating environmental justice into all of our programs, policies, and activities. This report highlights the Agency's determination to pursue environmental justice in a manner consistent with existing environmental laws and their implementing regulations. We will do so in coordination with our partners at all levels of government and throughout the public and private sectors to be sure that protection from environmental hazards is universal.

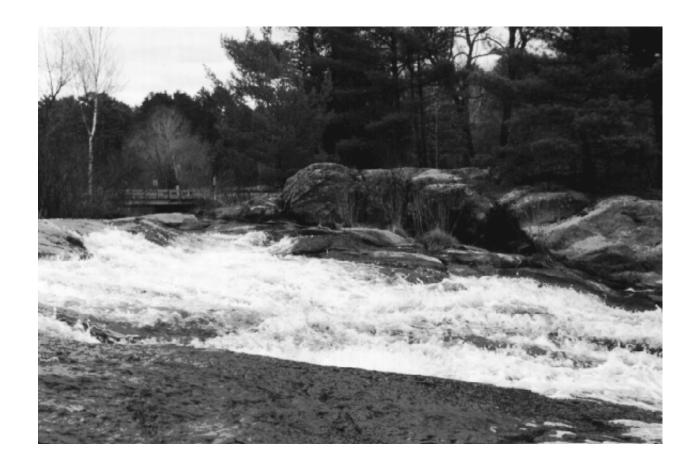
Environmental justice is achieved when every American, regardless of race, culture, education or income enjoys not only the same degree of protection from environmental threats, but also equal access to the decision making process that ensures a healthy environment in which to live, learn, play, and work. To achieve this goal, we will include all stakeholders in an open, creative, and cooperative effort to effectively address the environmental, health, economic, and social challenges facing our communities.

To assist you in obtaining additional information on any of the issues contained in this report, a list of the Environmental Justice Coordinators for EPA headquarters and each regional office is included as an appendix. I encourage you to take advantage of this resource.

Through the Agency's ongoing work, we will ensure that environmental protection reaches all of our communities. By doing so, we can pass along cleaner air, purer water, and healthier land to future generations in every corner of America.

Barry E. Hill, Director

Office of Environmental Justice



The mission of the U.S. Environmental Protection Agency (EPA) is to safeguard the natural environment—the air, land, and water—upon which all life depends, to protect human health, and ensure a sound environment for all Americans. Through the leadership of the Office of Environmental Justice (OEJ), EPA is working to ensure all communities are afforded equal environmental and public health protection. This is being accomplished through efforts to enhance community access to information and environmental education, so the public may better understand their environment and the opportunities they have to participate in the protection of their health and quality of life. The public can take responsibility for its community by participating in decision-making processes that directly affect their environment and public health. The EPA defines the term "environmental justice" as follows:

Environmental justice is the <u>fair treatment</u> and <u>meaningful involvement</u> of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. <u>Fair treatment</u> means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state and local, and tribal programs and policies. <u>Meaningful involvement</u> means that: (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity

that will affect their environment and/or health; (2) the public's contribution can influence the regulatory agency's decision; (3) the concerns of all participants involved will be considered in the decisionmaking process; and (4) the decisionmakers seek out and facilitate the involvement of those potentially affected.

As described in the definition, environmental justice is the goal to be achieved for all communities, so that: (1) people of all races, colors, cultures, income, and educational levels are treated fairly with respect to the development and enforcement of environmental laws, regulations, and policies, and (2) residents can be meaningfully involved in the decisions that will affect their environment and health. Environmental justice is about real people facing real problems, and designing practical solutions to address challenging environmental, public health, and quality-of-life issues.

Environmental justice emerged as a significant national issue in the mid 1980s. Since then, proponents of environmental justice have advocated programs that promote environmental protection in the context of sustainable development. From the time that EPA produced the report, "Reducing Risk in All Communities" in 1991, the scope of environmental justice has been one of identifying legal and technical tools, targeting resources, engaging all stakeholders in the environmental justice dialogue, and going beyond merely analyzing problems. The primary objective of environmental justice is to find solutions. Over the past decade, many communities have found that building partnerships is a key way of achieving environmental justice for all communities. Many of these partnerships result in solutions where everybody wins.

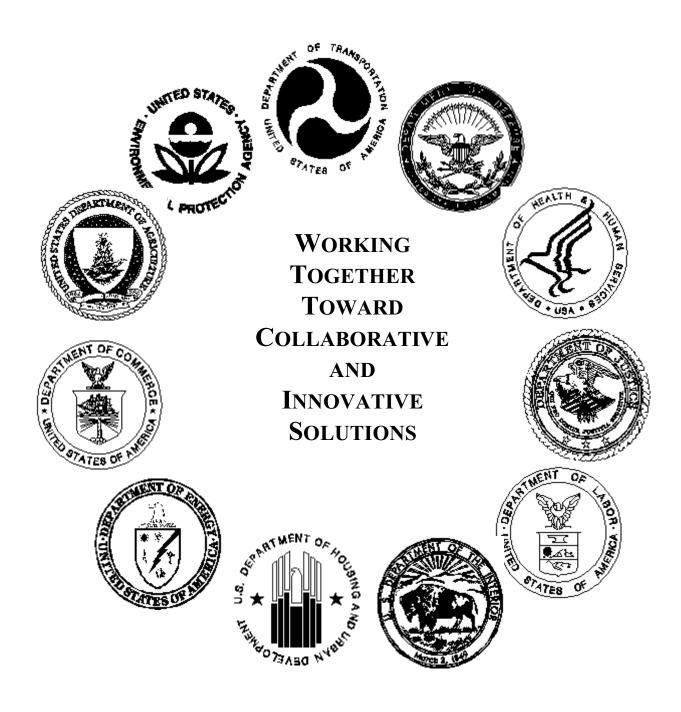
As a result, OEJ has adopted the theme, "Continuing to Move Towards Collaborative and Constructive Problem-Solving" for the 2000 Biennial Report. Over the past two years, this concept has matured significantly. There is now a seasoned staff within the environmental justice program at EPA, not only in OEJ and other national program offices, but most importantly within the regions. It is in the regions that the Agency comes into direct contact with the communities and other stakeholders confronting environmental justice issues. Three items stand out as important elements of this evolution:

1. OEJ has developed with others, and is aggressively implementing, a model for collaborative problem-solving that is holistic, proactive and comprehensive, includes all federal agencies, and builds partnerships with all stakeholders, including communities, state, local and tribal governments, faith and philanthropic organizations, the academic world, and business and industry. This model is captured in the Integrated Federal Interagency Environmental Justice Action Agenda. The goals of the Action Agenda are: (1) To promote greater coordination and cooperation among federal departments and agencies; (2) To make government more accessible and responsive to communities; (3) To initiate environmental justice demonstration projects to develop models for addressing community livability issues; and (4) To ensure integration of environmental justice in policies, programs and activities of federal government agencies.

Such a model is based upon several premises: (1) It promotes federal government support of solutions that "begin in the community and remain in the community;" (2) It envisions a holistic approach that addresses environmental, public health, economic, and social/cultural concerns in an integrated manner; (3) It links federal, state and local, and tribal governments with comprehensive community-based planning processes; (4) It seeks better targeting and leveraging of public and private resources; (5) It seeks to develop a template for holistic community-based solutions to environmental justice issues; and (6) It serves as a platform for advocacy of a new way for government to do business.

- 2. Another hallmark is the thoughtful use of facilitators to help with consensus-building and use alternative dispute resolution. EPA recognizes that collaborative and constructive problem-solving requires partnerships, often between groups who have traditionally seen themselves as adversaries. Moreover, environmental injustice allegations create challenges for collaborative and constructive problem-solving due to severe power imbalances, questions about who speaks for an affected community, and cross-cultural differences. OEJ has established a program, through the Agency's Alternative Dispute Resolution Office, to help facilitate consultative decision-making processes that result in just and equitable resolutions of environmental justice controversies.
- 3. A third important hallmark of a maturing approach toward collaborative and constructive problem-solving is a new method to environmental justice training. During the past year, the Agency has established an Environmental Justice Training Collaborative. This effort evolved in response to the EPA regional and headquarters environmental justice programs' recognition of the need for training of EPA staff, other federal agencies, states, tribes, business, industry and others. The Collaborative is built on partnerships among those with the most direct knowledge of environmental justice issues (i.e. affected communities.) The Collaborative has begun to develop a basic environmental justice curriculum that is being field tested.

As we look to the future, EPA is seeking to build more partnerships with all stakeholders in the environmental justice dialogue deliberation. This will require a great deal of patience and it means learning about each other as well as issues. It demands that we listen carefully and have the will to work through our differences. It demands that we learn not only about the facts at hand, but also inquire about what is valued, honored and needs to be protected or sustained. It demands that we continually educate each other. These challenges are extraordinary, but we are determined to confront and overcome them.



Over these past two years, EPA has made a concerted effort to enhance its coordination with other federal agencies to address issues of environmental justice. Through the Federal Interagency Working Group on Environmental Justice (IWG), EPA has seen the achievements possible when federal agencies commit themselves to form partnerships to address issues of environmental injustice. These federal partnerships have proven essential to address the wide range of environmental, public health, and economic concerns which tend to cut across agency missions and responsibilities. This chapter describes specific environmental justice projects, programs, and activities of EPA undertaken in collaboration with other governmental agencies or community organizations. This chapter demonstrates the need for Federal, state and local, and tribal governments to work together in order to effectively address the multi-faceted environmental, public health, and economic concerns facing minority, low-income and tribal communities.

White House Council on Environmental Quality (CEQ)

Environmental Justice Dialogue in Los Angeles. In tackling matters of environmental justice, EPA Region 9 has worked jointly with a variety of agencies and organizations. One of the most effective collaborative efforts was the White House Council on Environmental Quality (CEQ) Environmental Justice Dialogue in Los Angeles. The dialogue took place on July 10 and 11, 1998, and was coordinated by CEQ and Region 9 with the following federal agencies: Department of Agriculture (USDA), Department of Commerce (DOC), Department of the Interior (DOI), Department of Justice (DOJ), Department of Housing and Urban Development (HUD), Department of Transportation (DOT), and the Agency for Toxic Substances and Disease Registry (ATSDR). The dialogue resulted in a series of commitments made by CEQ and the Federal agencies to the community. A number of these commitments have led to significant accomplishments for environmental justice.

One of the concerns raised at the meeting was a potential problem with cancer deaths in the Bell Gardens Area, a predominantly Latino community in Southeast Los Angeles. Investigations and soil removal action showed low concentration of hexavalent chromium in the school yard, due to a near-by chrome plating facility. California's Department of Toxic Substances Control (DTSC) issued an order to require the facility, Chrome Chrankshaft, to reduce the potential dust migration from the facility. In January of 1999, the facility permanently closed. EPA worked with the State to develop an investigation of the work plan and community outreach plan. EPA is also facilitating the process of bringing the state and local agencies together to address health concerns such as cancer, fertility problems, asthma, and birth defects.

Another commitment made to the community involved the potential sale of contaminated fish in Asian communities. The possible risks associated with the consumption of contaminated fish have been recognized in Los Angeles for about 15 years. A number of actions have been taken to advise fishermen and consumers of the risks and prevent the sale of contaminated fish in retail markets. EPA has dedicated funds to have the California Department of Health Services (CDHS) develop a public outreach and education plan.

In March 1999, EPA (as co-chair of the CEQ Interagency Task Force on environmental justice for Los Angeles) convened a meeting that focused on transportation and enforcement issues identified by the community as priority issues. The meeting was well attended with approximately 65 people representing community organizations, and local, state and federal agencies. A majority of the 15 federal commitments have been accomplished.

New York City Interagency Environmental Justice Task Force. Federal agencies, including the Department of Housing and Urban Development, the Department of Justice, the Army Corps of Engineers, and EPA made several commitments to address environmental justice concerns at the March 6, 1999 White House Council on Environmental Quality forum in New York City. In response to concerns raised by environmental organizations, an Interagency Task Force was formed to implement commitments dealing with air quality, waste transfer stations, public health and open space. Foremost among the concerns of the environmental organizations was the need for funding sources. Therefore, the Community Grants Workgroup, coordinated with the Interagency Task Force, sponsored an environmental grants workshop held on December 8, 1999. The purpose of the grants fair was to identify grants, loans and other support available to environmental organizations in the New York City metropolitan area. Workshop participants received information on how to apply for a variety of federal and private grants. In addition, participants attended workshops that provided information and tools to assist in writing successful proposals.

Interagency Working Group on Environmental Justice

Executive Order 12898 established a Federal Interagency Working Group on Environmental Justice (IWG) chaired by EPA and comprised of eleven departments and agencies and several White House offices. These include EPA, Departments of Defense, Energy, Labor, Interior, Transportation, Agriculture, Housing and Urban Development, Commerce, and Health and Human Services, the Council on Environmental Quality, Office of Management and Budget, Office of Science and Technology Policy, Domestic Policy Council, and Council of Economic Advisors. EPA's Office of Environmental Justice (OEJ) serves as the lead on the Interagency Working Group to incorporate environmental justice into all federal agencies.

Integrated Action Agenda

In FY 2000, the IWG developed the "Integrated Federal Interagency Environmental Justice Action Agenda" (Action Agenda) that is rooted in building proactive and dynamic partnerships committed to integrated collaborative and constructive problem-solving at the local level. The Action Agenda results in better utilization of existing federal resources through better targeting and leveraging of such resources in partnership with local groups and all stakeholders. The Action Agenda is a new effort, begun in 2000, and is built around fifteen demonstration projects in diverse urban and rural communities in virtually all regions of the nation, including Puerto Rico and Alaska. Thus far, these demonstration projects have leveraged between \$12 to \$15 million in public/private resources. The goal of these projects range from environmental cleanup, brownfields and economic development, public health and children's health, to community education and capacity building. To help the public better access the federal government, the IWG produced a directory of federal environmental justice contacts. (see below) All stakeholders, including community groups, faith based organizations, states and local government, and industry have voiced support for the IWG's "win-win" approach. The premises of the Agenda are the following:

- 1. Promotes federal support of solutions that "begin in the community and remain in the community,"
- 2. Links federal, state and local, and tribal government with community based comprehensive planning processes,
- 3. Seeks collaboration and integration so that resources can be better targeted and leveraged,
- 4. Develops a template for holistic community based solutions to environmental justice issues, and
- 5. Serves as a platform for advocating a new way of doing business.

Demonstration Projects

The interagency environmental justice demonstration projects are a great example of how the federal agencies and other stakeholders, including communities, businesses, and state and local governments, and tribal governments can work together to develop and implement meaningful, effective and desirable solutions. The federal government is establishing a new baseline from which to build future progress and policies to address environmental injustices. The demonstration projects are:

- 1. Greater Boston Urban Resources Partnership: "Connecting Community and Environment" (Boston, MA/) Lead Agency: EPA
- 2. Camden City of Children Partnering for a Better Future (Camden, NJ) Lead Agency: HUD
- 3. New York City Alternative Fuel Vehicle Summit (New York, NY) Lead Agency: DOE

- 4. Addressing Asthma in Puerto Rico–A Multi-Faceted Partnership for Results (Puerto Rico) *Lead Agency: HHS/HRSA*
- 5. Bridges to Friendship Nurturing Environmental Justice in Southeast and Southwest Washington, DC (Washington, DC) *Lead Agency: DOD (Navy)*
- 6. Community Cleanup and Revitalization in Arkwright/Forest Park (Spartanburg, SC) Lead Agency: EPA
- 7. Protecting Children's Health and Reducing Lead Exposure through Collaborative Partnerships (East St. Louis, IL) *Lead Agencies: EPA & HUD*
- 8. Bethel New Life Power Park Assessment (Chicago, IL) Lead Agency: DOE
- 9. New Madrid County Tri-Community Child Health Champion Campaign (New Madrid County, MO) Lead Agencies: EPA & USDA-NRCS
- 10. Easing Troubled Waters: Ensuring Safe Drinking Water Sources in Migrant Farmworker Communities in Colorado (Colorado) *Lead Agency: EPA*
- 11. Environmental Justice and Public Participation Through Technology: Defeating the Digital Divide and Building Community Capacity (Savannah, GA and Fort Belknap Indian Reservation, MT) *Lead Agency: DOE*
- 12. Protecting Community Health and Reducing Toxic Air Exposure through Collaborative Partnerships in Barrio Logan (San Diego, CA) *Lead Agency: EPA*
- 13. Oregon Environmental Justice Initiative (Portland and Rural Communities, Oregon) Lead Agency: DOJ
- 14. Metlkatla Indian Community Unified Interagency Environmental Management Task Force (Ketchikan, AK) *Lead Agency: DOD*
- 15. Environmental Justice in Indian Country: A Roundtable to Address Conceptual, Political and Statutory Issues *Lead Agency: DOE*

Highlights of Projects

The Interagency Environmental Justice Action Agenda is a new effort, begun in 2000. Fifteen National Interagency Environmental Justice Demonstration Projects were announced in May 2000. Goals of these projects range from environmental cleanup, public health, children's health, economic development, to community capacity building. The IWG has also produced a directory of environmental justice contacts and a website to ensure better access to federal agencies. The Environmental Justice Action Agenda involves eleven federal agencies and has created partnerships with all stakeholder groups, including communities; research, health, and philanthropic institutions; tribal, state and local government; and business and industry. The Action Agenda can be found on EPA's web site at the following address:

http://www.epa.gov/oeca/main/ej/iwg/actionagenda.pdf Specific accomplishments include:

• Environmental Justice Demonstration Projects have leveraged between \$12 to \$15 million in public/private resources, thus far.

- Re-Genesis, a community-based organization, is leading community cleanup and revitalization effort in two African American neighborhoods of Spartanburg, South Carolina.
- Children's health project in Camden, New Jersey is conducting outreach and education on lead and asthma through innovative efforts like a Lead Exploratorium.
- US Postal Service has committed \$1.93 million for purchase of electric and alternative fuel vehicles for use in New York City's South Bronx.
- Bethel New Life, faith-based community development corporation in the West Garfield section of Chicago, Illinois is using innovative "green" technology to turn abandoned industrial area into a revitalized economic center.
- Bridges to Friendship seeks to ensure that the local community benefits from Naval base cleanup and conversion in Washington, DC.
- East St. Louis, Illinois project has leveraged more than \$4 million for lead assessment and abatement.
- California Air Resources Board selected Barrio Logan (San Diego, CA) as a model for its Neighborhood Assessment and Children's Health programs.
- Puerto Rico Asthma Coalition held a strategic planning conference of more than 700 participants.
- Three rural communities in New Madrid County, Missouri has built a unique partnership to protect children's health in areas of lead, asthma/allergies and water quality.
- Community technology centers are being established in Savannah, Georgia & Fort Belknap, Montana through utilization of surplus government computers.
- Metlakatla, Alaska and East St. Louis, Illinois have been selected as National Brownfields Showcase Communities.
- Colorado farmworker project is developing GIS maps of migrant farmworker camps and drinking water sources.

Completed Demonstration Projects

American Indian/Alaskan Native Environmental Justice Roundtable. Federal agencies in collaboration with tribes, tribal organizations and others held a National Tribal Environmental Justice Roundtable, August 3 and 4, 2000, in Albuquerque, New Mexico to identify the broad range of cultural, religious, economic, social, legal and other issues related to environmental justice in Indian country. This effort grew out of a commitment by Federal agencies to tribal groups at the June 1999 environmental justice conference in Hilton Head, SC.

The Roundtable is one of 15 initial demonstration projects under the Environmental Justice Action

Agenda, developed by the Interagency Working Group. DOE was the lead agency for this effort with assistance and support from EPA, DOJ, DOI, HHS, HUD, DOD and USDA. Region 8, with the assistance of Region 6 environmental justice staff, organized a site tour of the Petroglyph National Monument in conjunction with the Roundtable.

A report on the proceedings and recommendations created during the meeting can be obtained by contacting EPA's Office of Environmental Justice.

Other Interagency Cooperation Efforts

Urban Resources Partnership. The Urban Resources Partnership (URP) brings together a number of Federal and state agencies, non-profit organizations, local businesses, and other foundations in selected cities across the country to provide funding and on-site technical assistance for community-led environmental projects. EPA has been an active partner since URP's inception in 1994, providing resources and assistance to a number of local projects which target under-served communities. Projects include transforming blighted vacant areas into community gardens, parks, and green community spaces, teaching young people environmental awareness, and restoring wildlife habitats. EPA's Office of Water provided assistance throughout 1999/2000 through serving on URP's National Steering Committee as well as providing continued technical and program guidance and assistance. URP is an excellent example of partners coming together at all levels to successfully accomplish on-the-ground projects in disadvantaged communities.

Region 1

Greater Boston Urban Resources Partnership. A model for interagency cooperation, coordination and partnership is the Greater Boston Urban Resources Partnership (GB-URP) "Connecting Community and Environment". This is an extraordinary place based model which demonstrates Region 1's efforts to build community coalitions. This Partnership was initiated in 1995 by Region 1 with the specific purpose of encouraging Federal agencies to target their resources to local communities to resolve public health and environmental issues. The GB-URP includes community organizations and agencies, business, and Federal, state and local governments. A major aspect of the Partnership has been its sustainability and its ability to help urban communities carry out strategies that link social, economic, and environmental concerns. Since its inception, the Partnership has periodically assessed its goals and reassessed its priorities and currently has a strong focus on livability issues.

The GB-URP consists of 39 agencies, organizations, businesses, academia and local, state and Federal government entities that have signed a Memorandum of Understanding committing

either financial or technical resources to the activities of the GB-URP. The partners consist of seven (7) local non-profits, ten (10) regional non-profits, six (6) individuals or organizations from the private sector, two (2) academic institutions, five (5) representatives of local government, five (5) representatives of state government, and four federal government agencies including the Forest Service, Natural Resources Conservation Service, Region 1's Urban Environmental Initiative, and Housing and Urban Development. The GB-URP has an Executive Committee consisting of a Chair, Co-chair, Treasurer and Clerk, as well as six at-large members.

The GB-URP started out as a meeting between government agencies and community groups seeking an explanation of the permitting process. It has evolved into a Partnership which:

- 1. Encourages community involvement, serves community needs, and provides community benefits.
- 2. Fosters cooperation among residents and government officials for the enhancement of the urban environment.
- 3. Serves and involves low-income communities and those of color that have traditionally had little access to environmental resources.
- 4. Plans for long term sustainability and improvements that address community needs.

The GB-URP model is improving efforts and strengthening relationships. While the goals lie in the achievement of livable communities as communities define them, the process ensures collaboration among parties with the resources and expertise to enhance a resident's quality of life.

Region 2

Asthma Summit. In May, 2000 Region 2 hosted a summit on asthma entitled the Environmental Justice Children's Initiative along with the Department of Housing and Urban Development and the Department of Health and Human Services. Officials from state agencies were invited to develop a strategy for filling the gaps in current action on asthma. Building on the national Cabinet-level initiative to reduce environmental impacts of children's health, this regional strategy is focusing on youngsters. In order to complement rather than duplicate other regional initiatives (e.g., the collaboration between public health officials and managed care organizations), the summit emphasized prevention of exposure to known asthma triggers, in homes, schools and the outside environment, instead of medical treatment of asthma.

The goals of the summit were to identify opportunities for each agency to use its unique leverage and capacity to reduce rates and severity of asthma, and selecting one or two initiatives that could benefit specifically from a regional approach and cooperation across public health, environment, education and housing. This is an example of the federal partnerships the Region has

been involved in and continues to be involved in relative to environmental justice. For each project, the Region is focusing on their sustainability and a replication by other communities.

Region 5

Partnerships. This collaborative partnership seeks to protect children's health by reducing lead exposure in East St. Louis, IL and the St. Clair County region. Lead poisoning is an especially devastating problem in East St. Louis, where children have been tested for rates four times the national average. This collaboration consists of St. Mary's Hospital, Neighbors United for Progress, Illinois Department of Public Health, St. Clair County (Intergovermental Grants Department), Department of Housing and Urban Development, Army Corps of Engineers, and the EPA. It will target environmental justice areas for outreach, screening, testing and housing rehabilitation. Through this collaborative effort, the groups will be able to avoid redundancy and maximize the use of grant dollars.

Region 7

Partnership with Department of Housing and Urban Development. Region 7 and the Department of Housing and Urban Development (HUD), Great Plains Region have formed an informal but strong partnership on issues of mutual responsibility and interest in environmental justice communities. HUD has been a supporter and active participant in Region 7's Diversity and Environmental Justice activities. The Region has supported HUD on fair housing, civil rights, and community building activities. HUD and the Region are putting into action the commitment federal agencies have made to partner and leverage resources as we serve the public.

Region 8

Migrant Farm Worker Communities. This project serves as one of 15 national demonstration projects selected by the Environmental Justice Federal Interagency Action Agenda Working Group. The project strives to identify and assess the drinking water sources of migrant farmworker camps in Colorado. The project brings together various governmental agencies as well as health and environmental groups to work collaboratively to address the problems encountered with the assessment. EPA is the lead agency for this effort. Other active government agencies include the Departments of Health and Human Service, Labor, State, and Agriculture.

Region 9

Federal Regional Council. The Region 9 Federal Regional Council (FRC) is a partnership between the Departments of Health and Human Services, Labor, Housing and Urban Development, Justice, Interior, Transportation, Energy, and EPA. The FRC consists of three (3) committees: (1) Pacific Island, (2) Tribal, and (3) Border. The FRC' purpose is to address the persistent problems in impoverished areas throughout the region. Region 9 chairs the Border Committee and the East Palo Alto Subcommittee. The FRC has adopted two (2) geographic focus areas: North Richmond and East Palo Alto, and has established two (2) task forces, one for each community. The East Palo Alto task force focuses on directing federal attention toward issues such as redevelopment, crime, and transportation. Currently the FRC meets bi-monthly with the local government to discuss these issues and to try to match need with resources.

Through the efforts of the FRC, many sites have been cleaned up, training and employment opportunities have increased, transportation services have improved, and community redevelopment projects have been initiated. These successes are due to the partnerships that have been developed between the federal, state, county, and local agencies, as well as the private sector.

Border Air Monitoring Project. The Border Air monitoring project was recently initiated by the Environmental Health Coalition (EHC) in a low-income, Latino community in San Diego. This community, called Barrio Logan, borders an industrialized section of the San Diego Bay and is considered by many to be one of the most polluted communities in the county. Barrio Logan is surrounded by freeways, and is subject to the annual release of three million pounds of toxic air pollution from multiple small industrial sources. The respiratory health hazard index for the Barrio Logan area is 100-200 times above acceptable levels, and up to 20 percent of children in the area suffer from severe breathing problems. Despite this, there were no air monitors in the area to assess the extent of the air pollution.

Representing the Barrio Logan community, the Environmental Health Coalition (EHC) worked with the San Diego Air Pollution Control District (APCD) to obtain a temporary air monitoring station (initially 6 months) to be placed at Memorial Academy, a local Barrio Logan high school. EHC, along with a coalition of stakeholders which included the San Diego American Lung Association, the Industry Alliance, the San Diego Unified School District, the Board of County Supervisors, the local Perkins Elementary School, and Community Family Health Centers persuaded the California Air Resources Board (CARB) to finance a six month air monitoring station to measure the pollutants impacting the community.

National Environmental Policy Act Implementation

Region 3

King William Reservoir, Virginia. The Regional Raw Water Study Group (RRWSG), a consortium of local governments on Virginia's Lower Peninsula, are proposing the construction of a dam, fresh water reservoir, and a pumping station in rural King William County, Virginia. The dam would create a 1,500 acre reservoir on Cohoke Creek by pumping water from the Mattaponi The proposed project may impact the social structure and sense of community of the Mattaponi, Upper Mattaponi and Pamunkey Indian tribes. The reservoir would be located between the tribes' reservations. Construction of the reservoir and it's potential secondary impacts such as residential development, raise issues related to the preservation of the cultural, spiritual, and archaeological integrity of the tribes. The project will result in the loss of 437 acres of wetlands in the Cohoke Mill Creek watershed. The construction of the reservoir will take place within the three mile buffer zone of the Mattaponi Indian Reservation. The tribes opposition relies, in part, on a state recognized treaty which does not allow any encroachment within a 3 mile radius of the reservation. The tribes are contending that if the reservoir is allowed they will lose a vital part of their cultural heritage. The Mattaponi maintain that the reservoir will threaten their historical use of the river and the land within the Cohoke watershed. Both tribes rely heavily on the land and water as a source of food, economic benefit and spiritual identity. The tribes met with EPA Region 3 on several occasions to solicit the Agency's assistance in ensuring their environmental justice issues were understood and addressed in the Final Environmental Impact Statement (FEIS).

In a July 1997 letter, Region 3 stated that the FEIS did not contain a full and complete analysis of the impact of the reservoir's construction on the environmental justice communities in the area, in accordance with the President's Executive Order on Environmental Justice (EO 12898), or contain a valid wetlands replacement plan. As a result, Region 3 requested that the Norfolk District of the Army Corps of Engineers require a supplement to the FEIS focusing on the wetland mitigation issues and the Native American cultural issues. On June 4, 1999, the Army Corps issued a preliminary decision to deny the Clean Water Act §404 Permit for lack of a demonstrated need to destroy 437 acres of wetlands, and potentially cause cumulative adverse environmental impacts, particularly to the American Indian population. The Army Corps extended the public comment period to July 16, 1999 on their decision to deny the permit. Region 3 will continue to work closely with the Army Corps to enhance its understanding of the environmental justice issues of concern pertaining to this project

Region 8

Zortman-Landusky Mine Reclamation. A 1992 proposed expansion of two gold mines, which had been operating since the late 1970s near the Fort Belknap Reservation in Montana, prompted

the involvement of EPA's National Environmental Policy Act (NEPA) and National Pollution Discharge Elimination System (NPDES) programs. The mines are located on lands that were originally part of the Reservation. The mines underwent a series of prior expansions before Bureau of Land Management (BLM) officials required an environmental impact statement. In November 1998, the Interior Board of Land Appeals remanded the Final Environmental Impact Statement (FEIS) to BLM based, in part, on BLM's inadequate consultation with the Fort Belknap Tribes and the lack of sufficient information about ground water at the sites. Region 8 provided technical comments on a ground-water study developed since the FEIS, and will encourage BLM to effectively consult with the Fort Belknap Community Council, and larger tribal community on the selection of the reclamation alternative. Environmental justice program staff were part of the NEPA review team and also successfully sought funding to allow the Fort Belknap Community Council to use independent technical expertise in the review of water quality monitoring data. Environmental justice program staff also facilitated efforts to design a tribal consultation plan to allow the BLM to meet the intent of a recent Interior Board of Land Appeals decision remanding the EIS to the BLM based, in part, on inadequate tribal consultation.

Master Manual for Operations of the Missouri River. The Army Corps of Engineers (Corps) is in the process of revising its Master Control Manual for operation of the Pick Sloan system of dams along the Missouri River. The Missouri River Basin is home to 19 tribal nations, many which are impacted by the management of the Missouri River. The environmental justice program has devoted resources to an internal team formed to review the NEPA documentation produced by the Corps associated with the review of the Master Manual. Environmental justice program staff also serve on a community based environmental protection (CBEP) team devoted to the Missouri River, and administer grants to the Mni Sose Intertribal Water Rights Coalition, a consortia of tribal governments in the Basin.

Devils Lake Study. Region 8 assisted the Army Corps of Engineers in providing a qualitative assessment of the social impacts and potential environmental justice concerns of the proposed Emergency Outlet to control flooding at Devils Lake, North Dakota. Data were collected during 1999 by means of telephone interviews with respondents from various communities throughout the Devils Lake region. This study has attracted the interest of the Canadian government, the Office of Federal Activities, the Office of International Affairs and other agencies.

Transportation. Environmental justice staff are currently working with the I-70 Project Team to provide environmental justice and social impact assessment assistance for the proposed I-70 Highway expansion in Colorado. Staff members are working with the Colorado Department of Transportation, the Federal Highway Administration, and its contractors to develop an assessment methodology for environmental justice to be included in the programmatic EIS for the expansion.

This chapter highlights a wide variety of allegations of environmental injustice and the efforts taken to find solutions to these environmental and public health problems. The allegations described here include those that communities have identified and those which EPA has identified through its own assessments or through the assessments of others concerned about issues of environmental justice.

In many instances, EPA is working collaboratively and in partnership with the communities and other stakeholders, including federal agencies, as well as state and tribal governments, to develop solutions to the problems identified. EPA recognizes that impacted communities frequently have critical knowledge and ability to help resolve local environmental and public health issues. Therefore, the Agency is working to ensure the active participation of concerned community organizations and individuals in their efforts to address environmental justice concerns. This chapter describes some of the unique partnerships which have formed between EPA and various stakeholders to achieve environmental justice for all communities.

Lead Problems and Solutions

Spanish Public Education Campaign on Lead. Through a cooperative agreement, the Office of Pollution Prevention and Toxics/National Program Chemicals Division (OPPT/NPCD) supported EVS Communications and its public health partner, the National Council of LaRaza's Center for Health Promotion, in the development of the nation's first Spanish-language television public education campaign on the problem of lead poisoning in the home. As a result of this award-winning effort, millions of Latino families were given their first exposure to general information about the most common places where lead can be found, and about the serious health consequences suffered by children and adults who come into contact with this dangerous environmental hazard.

Department of Justice Lead Educational Materials. OPPT/NPCD worked with the Department of Justice (DOJ) to assist communities in educating the public about the health risks of lead paint, identifying safe remediation methods and conducting blood lead level screenings in young children. Lead education information packets were sent to 250 coordinators of the DOJ's Weed & Seed program, one of DOJ's most extensive community-based programs to prevent, control, and reduce violent crime, drug abuse, and gang activity in targeted high-crime neighborhoods across the country. These lead education packets were also sent to FBI Adopt-A-School Programs, Regional Community Policing Institutes and to Environmental Coordinators in each of the 94 United States Attorneys Offices.

Region 1

Lead Safe Yard Project, Boston. Through the Environmental Monitoring Public Access and Community Tracking (EMPACT) program, Region 1 funded the Community-Based Environmental Lead Assessment and Educational Demonstration Program (a.k.a. Dorchester Lead Safe Yard Project - DLSYP.) This project was initiated with community partners to implement a pilot study to demonstrate how low cost/no cost techniques can reduce the exposure risk of preschool children to elevated levels of lead in soil within the target community and to set up a template which other communities could use to address this persistent lead issue. The community partners include Boston University School of Public Health, the Bowdoin Street Community Health Center (BSHC), and Dorchester Gardenlands, a Boston-based landscape company. The target community is the Bowdoin Street area in the North Dorchester section of Boston. There are roughly 150 homes in this target community.

Three important tasks were established to complete this project: (1) a community lead education and outreach program, conducted through community organizers to further develop community awareness of the dangers of lead poisoning and to enroll property owners into the project, (2) a sampling and analysis program to characterize enlisted properties, and (3) an abatement program to mitigate residential soils that contain high concentrations of lead.

The pilot was initially funded in two phases which took place during the summers of 1998 and 1999. At the completion of the second phase of this project in the fall of 1999, 42 residences had been addressed by the program, a template (tool kit that provides the basic materials necessary to initiate a lead safe yard project) had been developed, the team had conducted numerous seminars on lead safe yard work, and Lead Safe Boston, an office within the Boston Public Facilities Department, had begun plans to implement a lead safe yard program using the DLSYP template.

The DLSYP project was funded to deliver relevant environmental data to the public and to develop communication tools that might sustain the activity beyond the specific EMPACT funded program. These objectives have been largely achieved at the conclusion of Phase Two, although the third phase of the project has been funded. This phase will be used to demonstrate a coordinated effort between city-funded structural abatement and a lead safe yard program with the goal of achieving a more holistic solution. In this final phase of the project, EPA proposes a supplemental effort to quantify the effectiveness of low-cost residential soil intervention. The Agency has partnered with the National Center for Lead Safe Housing (NCLSH), the Lead-Safe Boston program office within the Boston Department of Neighborhood Development (LSB), and the Boston Health Department (BHD) to file for Housing and Urban Development (HUD) funding to leverage a new phase of the EMPACT project.

Safe Housing Lead Task Force Steering Committee, Rhode Island. A mayoral task force created a comprehensive set of recommendations to eliminate lead poisoning in Providence, Rhode Island–including enforcement, securing financial resources, and education and outreach. The Lead

Task Force Steering Committee, consisting of representatives from community groups, the Providence Housing Authority, the U.S. Department of Housing and Urban Development, the Rhode Island Department of Public Health, Region 1 and the Attorney General's Office, has developed and are currently tracking implementation of the task force recommendations through a Goals Management Plan. The Steering Committee meets quarterly to track progress against specific goals and tasks outlined in the Goals Management Plan. The Steering Committee has also developed a public reporting process to keep residents informed on progress to date.

Lead Abatement Project for Rhode Island Daycare Centers. As a result of a nearly \$500,000 lead abatement initiative launched by Region 1 and Rhode Island, children will be safer at dozens of day-care facilities. The initiative was made possible through an enforcement case brought by the EPA against the Rhode Island Department of Transportation (DOT).

The lead-abatement project was initiated in response to severe lead poisoning among Rhode Island's children. Although rates of childhood lead poisoning declined from 22% of children screened in 1994 to just over 12 % in 1997, Rhode Island's rates are still three times greater than the national average. The problem is especially critical in cities like Providence and Central Falls, where more than 25 % of kindergarten-aged children tested by the Rhode Island Department of Health had lead poisoning!

The project, which will be implemented over the next 18 months, is being funded by the Rhode Island DOT as part of an enforcement settlement initiated by EPA last spring for widespread environmental violations at a DOT facility in downtown Providence.

The settlement stems from numerous environmental violations that EPA inspectors discovered in 1997 at the DOT complex at 90 Calverley Street, including improper storage and handling of large amounts of hazardous waste. Investigators also discovered violations of the Clean Water Act, including the failure to take spill-prevention measures and the illegal discharge of oil into the Woonasquatucket River.

DOT also has agreed under the settlement to pay a \$100,000 civil penalty and to spend \$15,000 to fund two one-day environmental compliance training sessions for Rhode Island's municipalities. One of several lead-abatement projects EPA has initiated in Rhode Island, includes the investment of \$438,500 by DOT, as part of the settlement, to remove lead-contaminated paint and soils from licensed day-care facilities all across the state.

The project, administered by the Rhode Island Housing and Mortgage Finance Corp., will provide matching funds for facilities identified as posing a health risk based on a recent survey by the state Health Department. Completed in December 1999, the Health Department surveyed about 220 licensed day-care facilities, of which roughly half are considered to be lead safe. Just over 100 of the facilities-including 27 in Providence alone-had some sort of lead contamination problem, such as elevated lead levels in the soil or peeling/chipping lead paint inside or outside the buildings.

Region 2

Lead in Older Homes. Lead poisoning is an issue of high priority for Region 2's Pesticides and Toxic Substances Branch since low-income families, Asians, Hispanics and African Americans living in older housing or urban centers are disproportionately impacted. Region 2 has one of the largest percentages of old housing stock in the United States. Approximately three quarters of U.S. homes constructed before 1978 contain some kind of lead paint. However, in New Jersey, that number is closer to 85%, and that number rises to 90% in New York. Additionally, 14% of the children of New Jersey are from poor families, and the percentage rises to 25% of children in New York State.

The health affects of lead on children, even at low levels can cause nervous system and kidney damage, learning disabilities, Attention Deficit Disorder (ADD), and decreased intelligence. Speech, language and behavior problems, poor muscle coordination, decreased muscle and bone growth and hearing damage. As a result, EPA knows it is critical that an effort be made by multiple agencies to effect a change with regard to this environmental hazard. Region 2 has taken the following steps. An interagency group was initiated by the Office of the Regional Administrator to use the strengths and resources of different agencies to ensure that low-income, and disproportionately impacted communities are receiving maximum attention. Region 2 partnered with the New Jersey Interagency Task Force on the Prevention of Lead Poisoning, and the University of Medicine and Dentistry of New Jersey in collaboration with Ramapo College to identify, consolidate, compile, prepare and disseminate information on lead issues for inner city New Jersey schools; and awarded grant pilots for projects in Syracuse, NY, New York City and Camden, NJ.

Additional information is provided at the following web address:

www.epa.gov/region02/health/leadpoisoning

Region 3

City of Chester Lead Initiative - Supplemental Environmental Project. As part of the Office of Enforcement, Compliance and Environmental Justice's Chester Initiative, supported by community organizations, work continues on the Chester Lead Poisoning Prevention Project funded by a supplemental environmental project (SEP). The SEP is a project which is attempting to complete a children's blood-lead survey and massive public education about the effects of lead on residents, especially children, in Chester, Pennsylvania. The SEP also includes the removal of lead contamination from homes.

Lead in Logan Community, Philadelphia. The Logan section of Philadelphia is predominately African American. For years, many of the homes were sinking because the homes were constructed on top of a filled in streambed. Eventually these homes were condemned and the residents relocated. The City of Philadelphia tore down many of these homes in a 17 block area. Sampling by Region

3 found soil in the now vacant lots to have unacceptable concentrations of lead. Region 3 and the City entered into a Memorandum of Agreement in October 2000, whereby the City would perform the necessary soil removal, and other activities, with Region 3's Office of Enforcement, Compliance and Environmental Justice in an oversight role. The community has been very active in pursuing a remedy for the lead problem.

Region 10

Childhood Lead Poisoning, Oregon. A study conducted by the Oregon Health Division revealed that nearly 1 in 10 Latino, Native American and African American children residing in Oregon have lead concentrations in their blood greater than the Federal acceptable level. Region 10 funded the Urban League of Portland through the Environmental Justice Small Grants Program to inform and educate the low-income and people of color communities in Portland about the problems of childhood lead poisoning, its sources, and how to reduce exposure, increase the number of high-risk children tested for exposure to lead, and to develop the capacity of community leaders, and policymakers to advocate for and implement effective lead poisoning prevention programs.

On January 18, 2000, members of Region 10's Office of Civil Rights and Environmental Justice, the City of Portland, the Portland Health Department and numerous community groups (Environmental Justice Action Group, Urban League of Portland), held the first of what are now quarterly Lead Summits. The summit identified those areas of Portland most impacted by lead poisoning, the roles and responsibilities of the community groups and agencies working on the issue, and began to identify the gaps in current lead poisoning prevention programs. One of the biggest issues identified at the summit was the limited number of certified lead abatement companies.

Permitting Problems and Solutions

Region 6

Citizens' Air Permitting Workshop, Louisiana. On April 8, 2000, in order to further the Agency's environmental justice initiative, Region 6 participated in a "first ever" Air Permits Workshop, in Sulphur, Louisiana, with the Louisiana Department of Environmental Quality (LDEQ), to introduce citizens to the complicated procedures of applying for and receiving an air permit. LDEQ and Region 6's Air Permits staff set up shop in the Holiday Inn Express, in Sulphur, Louisiana, with exhibits, charts and computers, to explain what a company must do to obtain an air permit, emphasizing the roles of the two agencies as well as the roles of citizens. The idea of a permit workshop evolved from the October Calcasieu Parish Community Quarterly Meeting that Region 6 and LDEQ hosted in order to solve the environmental problems of that area. Approximately 35 citizens attended and seemed to appreciate the effort and good will of the two agencies in this first

major citizens' outreach effort. LDEQ and Region 6 are discussing the success of the workshop and evaluating it along with future outreach commitments.

Water Discharge Permit Evaluations, Louisiana. The Region 6 National Pollutant Discharge Elimination System (NPDES) Permits Branch has reviewed existing permit applications of four industrial dischargers (Olin, Conoco, Condea Vista and PPG) located in the Calcasieu Parish area, point sources determined by NPDES Branch to be potential dischargers of dioxin. Although the reviewed applications cited no discharge of dioxin at levels harmful to aquatic life and human health, the facilities are not required to routinely test for dioxin during the NPDES application renewal process. Correspondence (dated, December 21 and 22, 1999) directed LDEQ to follow procedures which give Region 6 an expanded role in permit review. Oversight of permits for minor discharges to impaired waters are now under the oversight of EPA where previously only major discharges were being reviewed. The process makes permit issuance for dischargers to impaired water bodies the top priority. Discussions between Region 6 and LDEQ target the impaired Calcasieu Parish basin as a very high priority for permit issuance and direct EPA review.

Region 9

South Phoenix RCRA Facilities, Arizona. The efforts of three facilities in the South Phoenix area to obtain permits has raised the concerns of residents. The first facility, Innovative Waste Utilization (IWU) has drawn high levels of attention. Over 150 people attended a public meeting that was held in November 1999. Concerns included opposition to the expansion of the facility, siting of the facility in an environmental justice community, the cumulative impacts of other industrial facilities in the area, the lack of public knowledge that the facility was operating for 20 years under interim status, and the distrust of government environmental agencies. The other facilities include Onyx Environmental Services which is seeking renewal of their current storage permit; and Safety Kleen Southwest which is seeking a permit to store, treat and recycle hazardous waste. Region 9 has been working closely with the Arizona Department of Environmental Quality (ADEQ) to ensure that environmental justice is a priority in the decisionmaking process.

California Energy Commission (CEC) Permitting of Power Plants in California. Region 9 has been working with the California Energy Commission (CEC) on environmental justice issues surrounding the permitting of over 30 new power generating facilities in California. Region 9 is working closely with CEC to ensure that environmental justice issues are addressed. An Environmental Justice Roundtable was held in Sacramento, CA in April 2000 that brought major stakeholder groups together, including EPA, CEC, developers, environmental justice advocates, community leaders, and other government entities. The purpose of the dialogue was to discuss issues such as demographics, risk assessments, public participation and disproportionate impacts.

Pesticide Problems and Solutions

Worker Protection Training. The Office of Pollution Prevention (OPP) has provided funding to several farmworker organizations to develop pesticide safety training and education programs, and to test the effectiveness of different approaches and materials. OPP has developed and tested the use of posters, handbooks, videos, pocket guides, flip charts, radio programs, audio tapes, pocket guides and laminated cards. Since farmworkers are predominantly non-English speaking, with low education levels, and high migrant and seasonal populations, outreach to this community has been challenging. OPP has worked with farmworker outreach and service organizations, as well as the grower organizations and state agencies, to distribute materials and make training resources available.

Through assistance from OPP, the Association of Farmworker Opportunity Programs (AFOP) has conducted a national pesticide safety education program working with 37 community-based farmworker organizations in 19 states. Working with the AmeriCorps programs, they have conducted training primarily in Spanish, but also in English, Vietnamese, Tagalog and Creole. With assistance from OPP, AFOP has developed, tested, and evaluated pesticide education materials, including radio programs, for English as a second language curriculum on pesticide safety and interactive approaches to protect farmworkers from pesticide hazards. They have trained more than 200,000 workers, families, children, and community members about pesticide safety and are expanding their outreach to children and their families with new programs and materials.

OPP has also funded other organizations to develop outreach programs to farmworkers and conduct training about pesticide safety. The Farmworker Health and Safety Institute, the National Center for Farmworker Health, the Farmworker Women's Leadership Project, Hispanic Radio Network and the Yakima Valley Farm Workers' Clinic are working with OPP to develop different approaches to reach farmworkers for pesticides safety that comply with Worker Protection Standard training requirements.

National Strategies for Health Care Providers. In April 1998, OPP held a workshop to initiate a multi-agency effort to create a national plan for increased training and awareness among health care providers of pesticides-related health conditions-"Pesticides and National Strategies for Health Care Providers." It is essential that health care providers recognize, manage and prevent pesticide-related health conditions in their patients and communities.

This initiative is led by OPP in partnership with the Department of Labor (DOL), Health and Human Services (HHS), and the Department of Agriculture (USDA). Workshop proceedings were distributed and a working group developed a draft implementation strategy. The draft Implementation Plan is available for public review and comment. A national meeting is anticipated in early 2001 to provide a forum for public discussion of the final recommendations.

Region 4

Protecting the Elderly From Pesticide Misuse, Kentucky. Kentucky, through partial funding from Region 4, conducts project Reach Out to Protect the Elderly (ROPE) in Southeast Kentucky. ROPE educates the elderly on pesticide issues in order to reduce pesticide misuse and pesticide application from unlicenced applicators. In addition to the Cumberland Valley Health Department, home health care services and community action agencies have committed to assist in the distribution of material developed under this grant. The grant dollars are spent for the development of brochures and other educational materials, inspection supplies, site presentations and visits. A brochure stressing the proper use of pesticides and how to hire a pest control operator is in draft format. The Structural Branch Manager, has met with the Kentucky State Police and community leaders and is getting a listing of key groups in Harlan County to help publicize this effort. The Attorney General has expressed interest and support for Project ROPE and would like to see it implemented on a statewide basis. Region 4 anticipates the balance of the funding for Project ROPE will be awarded this fiscal year.

Region 9

Reducing Pesticide Misuse, California. Region 9 is supporting a national initiative on urban misuse of pesticides. Two unregistered products have been targeted for their risks to children: insecticidal chalk and unregistered moth repellents. Insecticidal chalk is a special concern because it looks like ordinary blackboard chalk and the public may mistakenly believe it is safe. Poison Control Centers nationwide have received hundreds of reports of children exposed to these chalks. Region 9 is working with state partners to develop an enforcement and public outreach strategy to eliminate the import, sale, and use of this product. An educational brochure, highlighting the hazard to children, has been developed and translated into Spanish, Vietnamese, and Chinese. Region 9 is also concerned about possible use of this product at school sites and has initiated a compliance assistance campaign to educate school maintenance personnel about the importance of using only registered products and of following label directions for safe use. Region 9 issued a press release to publicize the risks these products pose to children and has filed civil complaints against two companies selling insecticidal chalk and three companies selling unregistered moth repellents.

Farmworker Safety in San Luis Obispo, California. The Environmental Center of San Luis Obispo (ECOSLO) is working to minimize environmental health risks facing farmworkers and to facilitate and improve communication and coordination among farmworker support groups and the county's environmental health stakeholders. Beginning in June 2000, 200 hundred farmworkers and their families will be surveyed by the California Department of Health Services (CDHS) and

community health workers from Promotoras Comunitarias and Head Start. The purpose of this effort is to determine the impact of California's worker safety regulations on farmworker health. Survey participants will be drawn from outreach efforts in San Luis Obispo County.

Persistent Bio-Accumulative Toxins Problems and Solutions

Persistent Bio-Accumulative Toxins (PBT) Initiative and Alaskan Tribes. EPA is increasingly concerned about a set of toxic chemicals that don't break down easily in the environment – chemicals known for their high toxicity, and for their ability to build up in the foodchain, and is making these chemicals a high priority for further reductions in the environment. This effort, named the Persistent, Bio-accumulative, and Toxic Pollutants (PBT) Initiative, will pay particular attention to human populations and ecosystems that have high exposures to PBT contaminants.

Alaska and Alaska Natives are particularly challenged by PBTs, because PBTs tend to accumulate in cold climates like Alaska, and Alaska Natives are heavily dependent on Alaskan wildlife, which accumulate elevated amounts of PBT's in their fatty tissues. Alaska Natives have been very interested in having analysis done to learn what the PBT concentrations are in the subsistence foods they rely on. A few years ago, Region 10 and the Office of Indoor Air and Radiation (OAR) launched the Traditional Knowledge Project, an effort that aims to build the capacity among Alaska Native tribes to address their own concerns about toxic and radionuclides contamination and changes in their environment. In FY 2000, Region 10, OAR, along with several more EPA offices, have provided resources to Alaska Native tribes along the Pacific coast to complete laboratory analysis of sea gull eggs they've collected to assess the level of PBT contamination. This may be only the second time that such laboratory analysis has been conducted in Alaska, and the first time that tribes have had significant control in terms of designing the analysis. The tribes have been trained to collect samples for analysis, using a tribal consensual process for choosing species of animals for analysis, and the tribes have determined which contaminants to analyze. Members of Alaska Native tribes from southeast Alaska to the western tip of the Aleutian Island Chain will be able to participate in this initiative. The information collected will also become a part of the international environmental data collection on the Arctic and near-Arctic regions.

In addition, Region 10 and OPPT are working together on the FY 2000 tribal budget initiative. The first year of the project has been supported by Region 10's multi-year Tradition Knowledge Project. Program directions for later years are currently being explored.

Environmental Justice 2000 Biennial Report: Continuing to Move Towards Collaborative and Constructive Problem-Solving

Fish Contamination Problems and Solutions

Alaskan Watershed Assistance. The Office of Wetlands, Oceans, and Watersheds, through a cooperative agreement with the River Network, has supported two Watershed Assistance Grants (WAGs) in Alaskan communities to support watershed-wide networks of community-based groups and to help strengthen their capacities to secure long-term watershed protection strategies.

One WAG supported activities in the Cook Inlet basin in Homer, Alaska, with special focus in the Alaska Native villages. Cook Inlet communities receive technical support with Geographic Information Systems (GIS) projects, volunteer water quality monitoring support, and networking support by building the capacity of community-based watershed groups. Another WAG in the Native Village of Kwinhagak (NVK) helped establish key partnerships and build capacity for NVK to manage watershed concerns by supporting activities such as: hiring watershed technical support staff, and providing assistance with issues relating to water rights and management responsibilities in the Topiak National Wildlife Refuge (which encompasses NVK).

Washington, D.C. Volunteer Water Monitoring Workshop. In October, 2000 the Coastal Management Branch conducted a two-day Volunteer Water Monitoring Workshop in Washington, D.C. The Workshop provided a forum for training volunteer water monitor leaders in the Washington, D.C. area. The key partner was the Earth Conservation Corps, which includes low-income minority residents of the Washington, D.C. area. The Workshop provided training in all aspects of monitoring, including data collection, analysis, and quality assurance/quality control. Related issues such as publicity, fund-raising, and partnerships were also covered, and to accommodate the needs of young adult leaders, a roundtable on water monitoring careers was conducted. One of the goals of this effort is to have a positive influence and focus on building the capacity of at-risk young adults so that they will become future leaders and role models for other disadvantaged youth in the area.

Region 9

DDT and PCB Contamination in Fish, California. A large deposit of contaminated sediment off the coast of the Palos Verdes Shelf is responsible for elevated DDT and PCB levels in white croaker and other fish from that area that are popular within the Asian community. Region 9's Superfund Program began its investigation of the Palos Verdes Shelf in July 1996. The investigation is ongoing, but the results of the human health risk evaluation indicate that the consumption of certain fish from this area, particularly white croaker, may pose serious health risks to recreational anglers and their families. Also, despite the commercial fishing ban on white croaker from the Palos Verdes Shelf area, contaminated white croaker continue to turn up in local fish markets (primarily in Asian communities). In March 2000, Region 9 issued a Proposed Plan for institutional controls (enforcement, public outreach/education and monitoring) as an interim response action for the area.

In July 2000, Region 9 began field work on a 3 month pilot capping project at the Palos Verdes Shelf that is designed to evaluate methods of cap construction and the associated short-term impacts. California Department of Health Services (CDHS) will oversee and evaluate the field testing of outreach materials and programs. After evaluating public comments, Region 9 will issue a decision on implementing the institutional controls described in the Proposed Plan. The Agency has also provided funds to the CDHS to develop a pilot public outreach and education plan on the fish consumption advisories. CDHS is currently working with several community-based organizations to develop pilot outreach materials and programs that will be tested.

Region 10

Asian and Pacific Islander Fish and Shellfish Consumption Studies, Washington. A study was conducted by Region 10, the University of Washington, National Institute for Environmental Health Sciences, and the Refugee Federation Service Center in Seattle, Washington to describe and quantify the seafood consumption habits of the Asian and Pacific Islander (API) communities within King County. The study was a first step towards gathering necessary information to determine what risks

the API communities may face from consuming contaminated seafood and to balance such risks with the significant health and cultural benefits associated with seafood consumption. Results of the study indicate that the API communities consumed seafood at a very high rate with the predominate seafood consumed being shellfish. First generation APIs consumed more fish than the second generation APIs and members of the Vietnamese and Japanese communities had the highest consumption and the Mien, Hmong



and Samoan communities consumed the least seafood. The study results also indicated that members of the Mien, Hmong and Laotian communities consumed more seafood that was harvested from local waters, rather than purchased commercially, and that members of the API community were interested in learning more about health issues surrounding eating fish, the safety of seafood harvested from local waters, and the safe preparation methods of seafood.

Tribal Fish Consumption Studies, Washington. The Tulalip and Squaxin Island Tribes of the Puget Sound Region of Washington, in cooperation with Region 10's Office of Water, conducted a survey of their communities to determine their fish and shellfish consumption rates. The survey included all age groups and obtained information on the species and fish parts consumed, preparation methods, and sources of fish. Information from the interviews was utilized to develop weight-adjusted consumption rates by tribe, age, gender, income and species groups. The results of the surveys indicated that the consumption rates were high with adult males having the highest consumption rates and the fish were prepared and eaten in a manner that tended to reduce intake of contaminants.

Drinking Water Problems and Solutions

Region 6

Comprehensive Performance Evaluation (CPE) of Drinking Water in Mossville, Louisiana. In response to citizen concerns regarding drinking water quality in Mossville, LA, Region 6 sampled the Mossville system in 1998 for Volatile Organic Compounds (VOCs), and in 1999 for dioxin. No compounds were detected above the drinking water standards for any compound tested. The first ever CPE at the Mossville public water system was conducted in 1999 by Region 6 and the Louisiana Department of Health and Hospitals (LDHH-the primacy agency responsible for implementing the Safe Drinking Water Act (SDWA) in LA). The Mossville system is in compliance with all SDWA standards, but the CPE identified some performance limiting factors that the operator began working on immediately to correct.

Region 10

Contaminated Drinking Water in Alaska Native Villages. Office of Water is currently funding a pilot program, at the request of Alaska villages, that is assessing the quality of traditional sources of drinking water and the potable water transport mechanisms, in three rural Alaska villages. The goal of the program is to raise awareness of possible sources and routes of contamination, and help the Native Villages make informed decisions about their drinking water. Initial assessment results indicate that the majority of the sources and transport mechanisms are contaminated with coliform bacteria at levels that can pose serious health effects.

Concentrated Animal Feeding Operations

Region 6

Concentrated Animal Feeding Operations (CAFOs) in Region 6 are being evaluated with a cumulative risk screening methodology created by the Region. The methodology accesses

demographic information regarding population, proximity of residents to potential pollution sources, minority representation, and economic status of evaluated rural communities, which is of use to the CAFO industries. The CAFO industries in Oklahoma are using the risk - environmental justice analysis to assess their present locations and to evaluate future corporate farm sites. The information has been incorporated into industry environmental impact statements submitted to Region 6.

Animal Feeding Operations

"Feedlots" have been at the center of a number of environmental justice complaints and highly visible ecological problems (e.g., new hog operations in poor African-American communities in eastern North Carolina and the possibility of pfiesteria. outbreaks).

Communities with Multiple Problems

Anacostia River Cleanup, Washington, D.C. The Ocean, Coastal Protection Division, of EPA' Office of Water, has partnered with the Center for Marine Conservation (CMC) to establish and maintain the annual International Coastal Cleanup Campaign (ICCC). The ICCC has the largest volunteer environmental data gathering and associated cleanup of coastal and underwater areas in the world. It is designed to increase public awareness about the impact of trash on our aquatic environments. The ICCC provides inspiration to hundreds of thousands of people who will mobilize along our waterways and beaches for the annual cleanup on the third Saturday of every September. Since 1986, the cleanup has grown from 2,800 volunteers on the coast of Texas to more than 500,000 volunteers in 55 states and territories of the U.S. and more than 90 countries annually. In 1998, over 509,000 volunteers from 74 countries cleaned up 5,300,484 pounds of trash from 12,169 miles of beaches and underwater sites. Once the trash has been collected, it is cataloged and the data is sent to the CMC for compilation and dissemination. Since 1986, EPA has provided financial, technical, and volunteer support to this effort. One of the locations EPA has focused on to address aquatic debris in the Washington, DC area is a tributary of the Anacostia River. The cleanup site is located in a minority neighborhood near the Anacostia River and has been popular for EPA employees and local communities for many years. Since this particular effort is designed to address the impact of debris in this impoverished area and help create local sustainability of the Anacostia River, EPA, CMC, and the National Park Service will continue to partner to increase local neighborhood participation in this event.

Region 1

Alternatives for Community & Environment (ACE) Smart Redevelopment for Roxbury, Massachusetts. Based in Roxbury, Boston's poorest neighborhood of color, ACE works with low-income communities and communities of color throughout Massachusetts to solve environmental and public health problems and build environmental leadership. This project brought together ACE's neighborhood partners to create strategies to integrate transportation, economic, and environmental concerns into proposed developments. To capitalize on the unprecedented economic boom in Boston, ACE has been working to ensure that development is accompanied by transportation and environmental improvements. These improvements will provide long-lasting benefits for those who live, learn, work, and play in Roxbury. Funding from Region 1 supports development of strategies for educating residents about the current development process, ensuring that resident concerns are addressed during the development planning and review process, and assessing the cumulative impacts of proposed projects.

South Branch of the Park River - Urban Greenspace Revitalization Project, Connecticut. The Eastern Connecticut Resource Conservation and Development Area (CTRC&D) program was created to assist local citizens in developing and carrying out action plans for the social, economic, and environmental betterment of their communities. The goal of the Region 1 Urban Environmental Initiative Community Grant project is to restore, maintain and enhance the ecological integrity and

social viability of the South Branch of the Park River Watershed, in the Behind the Rock neighborhood. This revitalization project will improve the environment of the Behind the Rock neighborhood by converting an overgrown dumping area into an open space for public use by removal of trash and undesirable species. The park will be landscaped with benches and flower pots. The area will be converted into a public park with the installation of walking trails and bikeways for the community.



Public Health Burdens in Chelsea, Massachusetts.

Region 1's Urban Environmental Initiative (UEI) has worked with community partners to address the disproportionate environment and public health burdens in the cities of Chelsea and East Boston, MA. There are 21 towns within the 120 square mile Mystic River Watershed which is home to the Chelsea River and Mill Creek. The Chelsea River is home to 50% of the New England petroleum fuel needs and 100% of Logan Airport's fuel needs. 173,061,000 gallons of fuel are transported through the Chelsea River Bridge each month. On June 8, 2000 the largest oil spill in Boston history

occurred in the Chelsea River – a total of 58,000 gallons of #6 fuel oil were dumped into the river due to a tug boat collision with the 591 foot long oil tanker Posavina. Member organizations of the Chelsea Creek Action Group applied jointly to EPA for funding in January 1998 to undertake a comparative risk assessment.

When this project was first proposed and presentations were made to the community, there was very little interest. The scope and magnitude of the project, like the environmental issues themselves, had overwhelmed and demoralized community residents. Outreach and support from the UEI helped unite the community and empower organizations to apply and secure funding to initiate a two year process to conduct a first-of-its-kind community-based comparative risk assessment to identify and evaluate targeted environmental, social, and public health issues affecting local residents in Chelsea and East Boston.

UEI also worked with community partners to organize and mobilize a movement of youth and citizens in the cities of Revere and Chelsea who are committed to the development of wetland conservation, education, and collaborative programming to address wetland restoration and preservation in the areas of the Rumney Marsh in Revere, and the Mill Creek in Chelsea. Utilizing the energy and enthusiasm of 10 full-time Youth STAR members, between the ages of 16 and 24, work is being done to develop wetland education workshops and community forums to target the greater populations of Chelsea and Revere, create and provide wetland activities and education projects for elementary and middle school age children from both cities, and design and implement outreach campaigns targeting wetland perimeter households.

Significant, Sustained Enforcement and Compliance Assistance Presence in the Woonasquatucket River area of Providence, Rhode Island. In 1998 and 1999, Region I undertook an intensive enforcement sweep of potential pollution sources to the Woonasquatucket River, and initiated an ambitious pollution prevention assistance effort targeted to auto body shops, auto repair facilities and junkyards along and near the river. Following up on information gathered by Region 1's Urban Enforcement Team, the Region conducted inspections at various types of manufacturing facilities in the Woonasquatucket River watershed, which includes the towns of Smithfield, Johnston, North Providence, North Smithfield and Providence. The inspections focused on underground storage tanks, wastewater discharges, hazardous waste storage and handling, and various other environmental compliance issues.

Region 1 also boosted its pollution prevention and technical assistance efforts in the area. The region's technical assistance team visited three-dozen auto body and auto repairs facilities to offer technical assistance on various environmental issues, including storm drain practices, hazardous waste storage and handling procedures and air emission requirements concerning auto body work. The region also conducted a cooperative effort with the Rhode Island Department of Environmental Management to inform dozens of junkyard owners in the watershed about regulatory requirements for developing and implementing stormwater management plans.

Region 8

Health Concerns in North Denver, Colorado. The North Denver environmental justice community has multiple problems and Region 8 has begun several projects, in coordination with other organizations, to begin to solve these problems. The Vasquez Blvd./I 70 Superfund project and related health studies are addressing health concerns and health risks from elevated arsenic and lead levels in North Denver residents' yards and gardens, through removals of contaminated soils in residential areas. The North Denver Environmental Initiative is addressing North Denver residents' non-Vasquez Blvd./I-70 Superfund health concerns, such as asthma, respiratory problems, increased cancer risk, through increased enforcement, compliance assistance, and pollution prevention activities. The Northeast Metro Pollution Prevention Alliance is also addressing North Denver residents' non-Superfund health concerns, through increased pollution prevention activities for industries such as trucking facilities and automotive repair shops.

Children's Health Problems and Solutions

Region 4

Region 4 Child Health Champion (CHC) Campaign Pilot. The CHC Campaign is a program initiated by EPA's Office of Children's Health Protection to empower local citizens and communities to take steps toward protecting their children from environmental health threats. Region 4 selected Prichard, Alabama, an environmental justice area, for this campaign. A community team, representing health care, education, local government, and business has developed and is implementing an action plan to address two environmental health hazards of greatest concern to their community; childhood asthma and lead poisoning. The community team has developed partnerships with an elementary school to gather absenteeism statistics due to asthma and to implement several education and outreach programs. The community team has established an information hotline and repository and has conducted several education and outreach activities. As a result of the screening programs that are being conducted, children with elevated blood lead levels have been identified. The community team is also implementing EPA's "Tools for Schools" program in both the public and private schools with special emphasis on reducing children's exposure to asthma triggers and pesticides.

Children's Pesticide, Asbestos and Lead (PAL) Environmental Health Education and Outreach Initiative. The PAL Initiative is a community-based program designed to minimize children's exposures to environmental health hazards which include lead-based paint, pesticides, secondhand smoke, radon, polychlorinated biphenyls (PCBs), and asbestos. In collaboration with

community organizations, Region 4's Pesticides and Toxic Substances Branch has conducted the Children's PAL Initiative in Baldwin County, Georgia and is now implementing this Initiative in Birmingham, Alabama, a community which has significant concerns with children's environmental hazards. The inner city area of Birmingham, Alabama is an environmental justice area with high percentages of housing with lead-based paint, asbestos, and significant Toxic Release Inventory (TRI) emissions in the area.

The program includes development and implementation of community specific educational programs for parents, children, educators, and decision-makers. Opportunities will be explored to implement interventions that will address several children's health issues and address the needs and interests of the community (i.e., childhood lead poisoning, asthma, pesticide poisoning). The program will utilize resources in the community and government to help empower families and neighborhoods to take better care of their children's environment. This project will also incorporate many ongoing Agency voluntary initiatives including the Tools for Schools Program, Integrated Pest Management in Schools, and other programs (i.e. asbestos, PCB's, asthma, radon) which address children's environmental health hazards. Information on the process to develop this community-based education and outreach project has been presented at national clinical and public health conferences.

Children's Health Issues in Anniston, Alabama. Region 4's Children's Environmental Health Program has provided education and outreach material for the community in Anniston, Alabama impacted by the superfund site and other sources. The Region is planning to coordinate with the Pediatric Environmental Health Speciality Unit (PEHSU) to provide education to physicians in Anniston, Alabama.

Pediatric Environmental Health Speciality Unit (PEHSU). Region 4 and the Agency for Toxic Substances and Disease Registry (ATSDR) have established a Pediatric Environmental Health Speciality Unit (PEHSU) at Emory University. The PEHSU will provide medical education, expert consultation, and training to evaluate the potential adverse health impacts to young children exposed to environmental contaminants. The PEHSU will serve as a regional resource for pediatricians, other health care providers, parents, teachers, the public, and the Region 4 and ATSDR staff. The PEHSU will also focus on pediatric environmental medicine as well as clinical specialty referrals for children.

Region 6

Healthy Kids, Healthy Communities Project, Albuquerque, New Mexico. A Region 6 community-based children's health project is being piloted in the community of Sawmill, a predominately Hispanic neighborhood, located in Albuquerque, New Mexico. The neighborhood is part of an area that has been identified as the "pocket of poverty" of Albuquerque. Hispanics

comprise approximately 77% of the population in this community. Sawmill also has a higher than average percentage of elderly, when compared with the rest of the city. The project centers around training residents of the community to perform indoor environmental assessments of homes, homebased day care, and schools. Indoor environmental risks that children are exposed to are identified, and recommendations are made for risk reduction. All environmental media are included; however, the project centers on issues that are within the control of the care-giver. Environmental risks to be evaluated include lead-based paint, radon, environmental tobacco smoke, pesticides, hazardous household chemicals, and asthma triggers. The American Lung Association of New Mexico is administering the project, with guidance from a community coalition that includes the City of Albuquerque Environmental Health Department, and other local agencies and non-profit groups concerned with children health.

Region 7

New Madrid County Tri-Community Health Campaign. In a partnership with Region 7 and the U.S. Department of Agriculture, the New Madrid County Tri-Community Child Health Champion Campaign was developed to increase efforts to identify, mobilize, and make use of Federal resources to benefit environmentally and economically distressed communities. The major focus of the project has centered around improving the health of the children in the communities. Lead poisoning, asthma/allergies, and water quality are specific areas of concern to children's health. Region 7 is facilitating efforts to help coordinate others joining this partnership to provide assistance to the communities of New Madrid.

Region 9

Childhood Champion Pilots - Asthma. Region 9 has two pilot projects, one in Los Angeles and the second in Nogales, Arizona. Both projects are focusing on asthma and the use of education and outreach tools that can help children and parents understand the disease, and the actions they can take to address asthma. The Los Angeles project involves a cooperative effort between Mothers's of East Los Angeles (a local community group), the American Lung Association (a national NGO) and the City of LA. The Nogales project pays for *promotoras*, locally known, Spanish-speaking, home health care workers, to visit the homes of families with asthmatic children and help reduce exposure to asthmagens.

Pesticides in Schools, California. Region 9 has awarded a \$30,500 grant to the Pajaro Valley Unified School District to assist them in reducing the use of chemicals for pest management on school grounds. The District is a predominately Latino farmworker community. This District has assembled a committee of parents, teachers, and district staff to work with Region 9 to find alternative methods for controlling indoor and outdoor pests at all school sites.

National Lead-Safe Kids Coalition Project. Through a cooperative agreement with the National Lead-Safe Kids Coalition, the Office of Pollution Prevention and Toxics' (OPPT) National Program Chemical Division supported the national distribution of the EPA publication Lead In Your Home: A Parent's Reference Guide (the Parent's Guide) through retail grocery stores in targeted communities. The National Lead-Safe Kids Coalition has also worked with dairies to place a lead awareness message on milk cartons at stores across the country. The message emphasizes the importance of calcium as an inhibitor of lead absorption in the body.

Lead Poisoning Prevention. The Region 9 Lead Program works closely with the California state and county lead programs and the state lead programs in Arizona and Hawaii. Lead hazard materials are made available for lead screening, home visits, and community programs and fairs. Last year Region 9 worked with the U.S. Department of Agriculture's Women, Infants and Children Program (WIC) to provide 18,000 copies of lead materials for distribution to WIC clients. The lead program also worked with Head Start, providing materials to 94 Head Start centers in Los Angeles County and 83 in Sacramento County. Region 9 plans on expanding this approach to other California counties in the future.

Expanding Adoption of Indoor Air Quality (IAQ) Tools for Schools. Region 9 Indoor Environments Team has an ambitious program to encourage schools to adopt the IAQ Tools for Schools program. The Team has trained more than 800 school district personnel and is now focusing on individual pilot schools within selected districts, and assisting the schools through initial implementation. Partners include state agencies, educational organizations, and the American Lung Association, which has created a model pilot "Mentor" program with the American Industrial Hygiene Association. The focus in 1999 was on four implementing districts: San Francisco, Oakland, Saugus Union, and Beverly Hills.

Urban Particulate Matter and Ozone Air Monitoring Project. Childhood asthma is dramatically increasing in urban areas and is a leading cause of school absences and hospital admissions for children. Castlemont High School in Oakland, California is one of two schools receiving an EPA Environmental Monitoring Public Access and Community Tracking (EMPACT) grant for the installation of particulate and ozone monitors and a weather station. The project focuses on empowering kids of color who normally would not have the opportunity to learn about particulate and ozone levels and the associated monitoring equipment. Data from the monitors will be available to the public via a Web site. The project will provide the students with hands-on experiences and the community will have access to information about air quality.

Pesticides at the U.S./Mexico Border. Region 9 is participating on the San Diego Advisory Committee for the California Department of Health Services (CHDS) outreach project on their report on "Pesticide Use in California" which analysed pesticide use levels around schools in Imperial and San Diego Counties. In 1998, EPA Headquarters contracted with CDHS to participate in Phase 1 of a three phase EPA research effort on pesticides' health affects on children at the Mexico Border, with Phase 1 focused on collecting information about pesticide use along the whole US Mexico Border. CDHS is planning an outreach effort to educate the public about their report, and has established advisory committees in both Imperial and San Diego counties to formulate the outreach strategy. The group is proposing outreach to land use planners and city officials to encourage them to use this information in land use planning decisions, particularly in the siting of schools and day care centers.

Asthma Training for Border Schools. The American Lung Association of San Diego and Imperial counties received an EPA grant to conduct asthma education for children along the U.S. Mexico border. Asthma hospitalization rates for children living in Imperial County, California and in Mexicali, Mexico are two to three times higher than those for California as a whole. Pesticide exposure, unhealthful levels of ozone and particulate air pollution, and poor asthma control may be contributing to these higher rates. Under this grant, Open Airways for Schools training will be held in fifteen low income schools in San Diego and Imperial Counties. The grant will also build capacity for similar programs in Mexicali.

Children's Environmental Health Network (CEHN). Region 9 awarded a grant to CEHN to expand and revise their web site focused on children's health issues. The site introduces and guides newcomers to children's health issues and helps organizations incorporate children's environmental health concerns into their ongoing activities. It includes pointers to 222 other organizations. Currently the site is visited by 30,000 users each month. The web site address is: http://www.cehn.org

Region 10

Children's Health Protection Workshop, Washington. A Children's Health Protection workshop was held on January 18, 2000 at the Region 10 EPA office. The workshop's goals were to inform, network, brainstorm, and link the resources of Region 10, the University of Washington (UW), and other children's health representatives. Discussions focused on the UW Institute for Risk Analysis and Risk Communication's activities, Fred Hutchinson Cancer Research Center's community intervention project, Yakima Valley asthma monitoring, lead poisoning programs, the Urban

Pesticide Initiative, and the Infant Mortality Project - Shoal water Tribe, Washington. The Office of Civil Rights and Environmental Justice highlighted the grantee's work addressing children's health protection, including projects related to asthma, lead poisoning, and contaminated drinking water.

State Efforts

Oregon Environmental Justice Initiative. Region 10's Oregon Operations Office, Office for Civil Rights and Environmental Justice, Office of Enforcement and Compliance, and Office of Waste and Chemical Management, along with the US Attorney's Office for the District of Oregon partnered to sponsor an environmental justice initiative in Oregon. The Oregon Environmental Justice Initiative is a three year project (2000-2003) designed to identify and mobilize federal resources to benefit environmental justice communities in Oregon. A major focus of this project is to improve public health through outreach, education, and enforcement. Federal, tribal, state, and local government partners will work with community groups to accomplish three community identified needs in Oregon: (1) reduce lead exposure in urban areas, (2) reduce pesticide exposure in rural areas, and (3) support tribal efforts to reduce illegal dumping on tribal lands. It is hoped that this approach to environmental problem solving, using the tools of enforcement and community-based research and education, will be implemented in other regions. The Initiative's goals for 2001 are: (1) develop one significant judicial lead enforcement case, (2) develop one significant judicial pesticides enforcement case, and (3) develop one significant dumping case in Indian country.

Vermont Department of Environmental Conservation. Vermont received a \$100,000 grant from EPA to achieve both compliance with environmental standards and remediation of adverse environmental conditions at mobile home parks while meeting the affordable housing needs of thousands of low-income Vermonters. The two specific goals of the project are: (1) Obtain compliance and reduce or prevent disproportionate adverse environmental and health effects on mobile home park residents, and (2) Develop enabling infrastructure at the state and local level with technical and legal resources available to assist mobile home park residents. This project seeks to address the unique environmental and public health concerns which impact mobile home park residence. Five state agencies have formed a mobile home park compliance group to share information, expertise, and authority to develop and implement solutions for mobile home park problems that previously seemed unsolvable from an individual agency perspective. The greatest need remains to be the implementation of technically practicable, as well as cost-effective, solutions to sewage disposal problems and water supply problems which plague many mobile home parks.

New Jersey Department of Environmental Protection. The New Jersey Department of Environmental Protection (DEP) developed the New Jersey Environmental Equity Community Partnership Program, through a \$100,000 grant from EPA, to establish and incorporate an "Environmental Justice Screening Process" for evaluating environmental justice issues of affected communities with respect to Air, Water, and/or Federal Hazardous Waste facility permits. Based upon the results from the environmental justice Screening Process, the DEP is working to establish an Environmental Equity Community Partnership (EECP) Program in those minority and/or low-income communities that may be experiencing a cumulative environmental burden. The State also created an "Environmental Equity" Policy which is available on their web site at: www.state.nj.us/dep/equity/

Tennessee Environmental Policy Office. Tennessee developed an environmental justice strategic plan, with a \$100,000 grant awarded by EPA. The State created its strategic plan, with significant community involvement, that is to guide all environmental justice activities of the Tennessee Department of Environment and Conservation (TDEC) and serve as a state and national model. The State is addressing environmental justice through three major components: (1) Achieving an integrated system of meaningful community involvement and participation through networks, such as Tennessee' regional Minority Health Coalitions and other organizations, (2) Integrating environmental justice strategies with a major ongoing initiative to re-engineer the Department's environmental regulatory programs, and (3) Developing and strengthening partnerships with other state and federal agencies. The State's Environmental Justice Strategic Plan can be found at the following web address: www.state.tn.us/environment/epo/ej/index.

Texas Natural Resource Conservation Commission. The Texas Natural Resource Commission (TNRCC) is working to enhance its effectiveness in complying with Title VI of the 1964 Civil Rights Act, with assistance from a \$100,000 grant from EPA. This effort is being made through the creation and guidance of a stakeholder advisory panel. The State developed the project goals with input from various communities that have filed Title VI complaints against the TNRCC or which have raised issues of environmental justice with the agency in order to determine the best course of action to reduce the possibility for future complaints. The advisory panel, made up of the partnering community representatives from Beaumont, Corpus Christi, Houston, and Wichita Falls--along with the TNRCC Chairman or his appointee, Public Interest Counsel, Office of Legal Services-Supplemental Environmental Projects, and a representative from a regional field office, are helping develop model programs to be piloted in their respective areas to address enforcement and compliance concerns.

State of Connecticut Department of Environmental Protection. Connecticut is developing a "Model Multi-Cultural Public Participation Plan," through the assistance of a \$100,000 grant from EPA. The state created and is working with a review team, comprised of state agency representatives and to include community-based grantee organizations, once they are selected through a competitive process. CTDEP is conducting training workshops with local zoning and planning officials, CTDEP staff, and the review team to: (1) familiarize the community-based organizations about the existing siting, public notification, and public participation procedures, and (2) engage in facilitated discussions of specific notification and informational needs within their communities. Through the review team's analysis of the state's existing public notification and participation process, the state will develop recommendations on how to implement a program to increase public notice and participation among low-income and minority communities. The result will be a model statewide public participation plan designed to improve public participation and to prevent discriminatory effects from Connecticut's permitting and other regulatory processes. The Connecticut model will be made available for distribution to other communities throughout the country.

New York State Department of Environmental Conservation (NYSDEC). New York is working to develop an Environmental Justice policy, with support from a \$100,000 EPA grant. NYSDEC has: (1) formed a multi-stakeholder Environmental Justice Advisory Group that reports to the Commissioner, (2) is developing an environmental justice permit policy that would articulate guidelines for addressing environmental justice issues which arise in permitting, (3) has enhanced the Department's Web site which enables the state to provide better and more timely information to the public, such as receipt of permit applications, among other things, (4) are conducting a series of legislative hearings throughout the state (to identify environmental justice concerns, to enhance public participation in development and implementation of the state's environmental justice program, encourage communities in planning for environmental and economic enhancement, and integrate environmental justice concerns into local land use planning, and related state and local activities); and (5) are seeking recommendations, from the Advisory Group, for a strategic environmental justice plan for the Department and the State of New York. Information on the state's environmental justice program can be found at the following web address:

www.dec.state.ny.us/website/ej/index.html

Indiana Department of Environmental Management (IDEM). Through the assistance of a \$100,000 grant from EPA, the state is working directly, and in partnership, with Indiana communities to develop an environmental justice strategy to integrate environmental justice goals into the Department's policies, programs and activities. The program is based on the following principles: (1) awareness & sensitivity, (2) public participation, (3) inclusiveness, (4) pro-activity, and (5) sustainability. Through this project, IDEM is doing the following: (1) Supporting a diverse Environmental Justice Advisory Committee which is developing the Environmental Justice Strategic

Plan, (2) Mapping concentrations of low income/minority populations and environmental impacts, (3) Educating communities about environmental issues and how they can get involved, (4) Developing a training program to train IDEM staff on environmental justice issues and how they can be more responsive to environmental justice concerns, (5) Determining how to include the implementation of the Strategic Plan into the Performance Partnership Agreement, (6) Establishing a single point of contact within IDEM to respond to environmental justice concerns, (7) Developing a protocol for facilitation of environmental disputes so that disputes can be resolved prior to decision making, (8) Evaluating, with community input, existing IDEM decision making processes regarding rule making & permitting, enhancing public participation opportunities, and the way in which IDEM communicates with the public, (9) Preparing a written commitment by IDEM to implement the strategy, including a time-line for implementation, and 10) Evaluating whether the strategy is being implemented within IDEM and how well it is being implemented.

Minnesota Pollution Control Agency (MPCA). The state is developing a strategic framework to incorporate environmental justice into its programs, which is being supported by an EPA grant of \$100,000. The state is working directly with communities to improve consideration of environmental justice concerns and compliance with Title VI in the state's environmental programs. Specifically, MPCA is: (1) Working with an advisory task force, consisting of representatives from multiple organizations representing minority communities where most environmental injustices are found, (2) Developing and disseminating environmental, geographic and demographic data to support outreach efforts and environmental program implementation, and (3) Developing a plan to integrate environmental justice considerations into MPCA's decision-making and communication strategies. MPCA is also committed to initiating a network of other state agencies to collaborate and address environmental justice issues.

Tribal Efforts

Kalispel Tribe of Indians. The Kalispel Tribe obtained a grant of \$100,000 to develop and implement an ISO 14001 conforming Environmental Management System (EMS) that integrates environmental justice goals with environmental performance objectives for the Kalispel reservation. The Kalispel Tribe developed the proposal with the support and advice of grassroots organizations, the Director of the Washington Department of Ecology and his staff, Pend Oreille County, and the Coeur D'Alene, Colville and Spokane Tribes. The ISO 14001 standard, establishes an internationally accepted framework for EMSs which can serve as a sustainable program that: (1) allows meaningful involvement of all members of the tribe in the development of goals for an environmental program, (2) prevents impacts from being disproportionately borne by subgroups within the tribe, (3) goes above and beyond compliance with environmental laws, (4) reduces pollution and pro-actively prevents pollution, and (5) ensures fair treatment.

Manilaq Association. The Manilaq Association, a consortium of 11 Tribes of Northwest Arctic Region, received a \$100,000 grant from EPA to identify, investigate, and document the environmental burdens placed on the Native people of the Alaska region. In addition, through the education of regional village representatives on how environmental justice issues are relevant to tribal concerns, this serves to evaluate the environmental injustices experienced by the native people of the Northwest Arctic over the last few decades, and to inform tribes on the importance of implementing environmental justice in tribal activities. An environmental justice guide is being developed and shared with the tribes of the Association. The document will serve as a tool to be used by tribes for evaluating environmental violations and as an environmental justice outreach and education tool. The guide will also be available to private, state and federal agencies as a reference to examine their compliance with environmental mandates.

Federal Facilities Problems and Solutions

Region 6

Contamination at Kelly Air Force Base. Kelly Air Force Base (KAFB) has been targeted for realignment and closure beginning in 2001. The KAFB soil contaminants include solvents, metals, petroleum, paint products and various other products used for aircraft maintenance and repair. Contaminants in shallow groundwater beneath KAFB and off-base include metals, solvents, and fuel constituents. A large chlorinated solvent plume has been identified offsite of the east KAFB boundary. Delineation efforts indicate the plume extends at least three miles to the east and two miles southeast. Region 6 has worked with the Kelly Gardens community to address environmental justice concerns. The agency has participated in site tours of communities adjoining KAFB and other San Antonio areas as well. Community-based organization representatives lead by the Southwest Public Workers Union, PODER and the Southwest Network have met with EPA and Texas Natural Resources Conservation commission on numerous occasions to discuss concerns and possible actions to address those concerns. ATSDR was petitioned by the late Congressman Frank Tejeda to perform a health assessment of the neighborhoods north and southeast of KAFB. ATSDR prepared a Public Health Assessment (PHA) - Phase I of KAFB and the surrounding community which was released on August 24, 1999. This report indicated that the community is not currently exposed to levels of contamination from KAFB that would cause citizens to become ill; however, the community may have been exposed to higher levels in the past. Since April 2000, the Air Force has been hosting public forums to discuss shallow groundwater contamination due to past activities. Currently 60-70 foram have been held for various community groups as well as interested businesses and political groups, additional forums are anticipated.

Using Supplemental Environmental Projects to Address Problems

Region 5

Supplemental Environmental Projects in the Greater Chicago Area. Representatives of Illinois EPA and U.S. EPA hosted a meeting with approximately 20 representatives of environmental groups to discuss supplemental environmental projects (SEPs), and the development of a SEP bank related to enforcement cases in the Greater Chicago area. Citizens for a Better Environment coordinated outreach to environmental groups, and encouraged attendance. After providing some background information regarding SEPs, including the federal SEP policy, and responding to questions, the group brainstormed on developing SEP projects. The agencies committed to circulating a list of project ideas for development by environmental groups. The meeting was well received by the groups in attendance. A similar meeting is planned for municipal representatives.

Alternative Dispute Resolutions - A Tool for Finding Solutions

The Office of Environmental Justice (OEJ) initiated a pilot program to provide low or nocost access to dispute resolution professionals to stakeholders involved in conflicts involving environmental justice issues. Through this program, OEJ hopes to understand better the value and appropriate use of dispute resolution techniques (e.g. mediation, facilitated dialogue, etc.) to environmental justice disputes. In addition, OEJ hopes to help parties bring specific conflicts to and equitable and just conclusion.

Environmental justice issues frequently demand complex decisions on equity, social and economic revitalization, health, and maintenance or improvement of a clean, safe environment. Frequently, these disputes are made even more complex by lack of information, lack of understanding of stakeholder concerns, lack of trust among parties, and frequently a longstanding history of uneasy relationships. Dispute resolution techniques have helped resolve disputes having these attributes in other contexts, and they hold promise for environmental justice disputes, as well.

However, before dispute resolution techniques are used widely it will be important to understand better how to address: cross-cultural differences; ability of a single or small number of individuals to "speak for a community;" and severe differences in power among parties. Through attention to these issues, OEJ seeks to create a record of experience that will help parties better understand how non-adversarial techniques can be used in an appropriate and effective manner.

Thus far, the pilot program has provided assistance to the implementation of a Superfund Administrative Order on Consent in Alabama, and in the implementation of measures to address air quality and land use concerns in the community of Barrio Logan in San Diego, California. OEJ welcomes written requests for assistance.

Solid and Hazardous Waste Problems and Solutions and Brownfields Cleanup

Social Aspects of Siting RCRA Hazardous Waste Facilities - Booklet. This booklet was developed for industry and state and local government's use to heighten their awareness of quality of life concerns faced by communities who live near RCRA hazardous waste management facilities. The document offers examples of quality of life concerns raised by environmental justice communities when facilities are sited. The document also shares experiences and creative mechanisms that have been developed in order to work effectively with communities, as well as encourages businesses and government agencies to address community concerns early, collaboratively and compassionately. In developing this document, the Office of Solid Waste held a one-day stakeholder forum "RCRA Subtitle C Waste Facility Social Siting Criteria Stakeholders' Roundtable" to get feedback from various groups (environmental and community, state agencies, industry and national organizations) to obtain relevant and accurate information on the draft booklet's contents. The booklet was then revised and publicized in April, 2000. The booklet can be found on the web at the following address:

www.epa.gov/epaoswer/hazwaste/tsds/site/k00005.pdf

Region 3

Abex Superfund Site, Virginia. The Abex Corporation Superfund site is located in the eastern section of Portsmouth, Virginia, and centers around a two-acre property containing a former brass and bronze foundry. The primary contaminant of concern is lead, however, other contaminants are present as well. The site includes the former foundry as well as adjacent contaminated soils. The largest residential area impacted is a portion of the Washington Park Public Housing Project which is home to approximately 160 predominately African American families. In January, 1999, EPA and Abex began the temporary residential relocation of the first group of Washington Park residents for the remedial action at the site (residents were previously relocated for the purpose of removing soil contamination "hot spots"). These relocations have since been completed. Also, the temporary residential relocations for heating duct cleaning in the Washington Park Housing Development were completed in February 2000. The air ducts were cleaned in 160 residential units where unacceptable concentrations of lead were detected. Soil removal in the adjacent private neighborhood is also progressing. The results of blood analysis, from samples taken from a number of Washington Park residents, did not detect lead above the health based concentration.

The site is one of the more complex sites in the region. Concerns about elevated blood lead levels in children lead Region 3 to bring in both the Centers for Disease Control (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR) to provide information, consultation, and support regarding lead poisoning and other public health issues. ATSDR and CDC participated

with the EPA in a series of public meetings and information sessions held for the residents. These agencies reviewed and assessed blood lead test results which were collected and analyzed by the Commonwealth of Virginia. The Department of Housing and Urban Development (HUD) was brought into the case by EPA, first because of questions regarding permanent relocation of Washington Park residents, then because of temporary housing issues, and finally because of renewed concern for permanent relocation. HUD has now assumed the lead on the relocation issue. The Army Corps of Engineers (COE) assisted EPA with the temporary relocation of residents during the remedial cleanup of the site, including finding lodging for the residents during their temporary relocation. The Department of Justice has provided significant legal assistance during the hearing process. The complex nature of this site makes it clear that the engagement of all the federal partners is vital in addressing issues EPA has neither the expertise nor legal authority which to address.

Fuel Contamination at Passyunk Homes Housing Project, Philadelphia. The Passyunk Homes Housing Project was a low-income housing project located in South Philadelphia. The property is owned by the Philadelphia Housing Authority (PHA). Approximately one million gallons of petroleum sits on top of the groundwater at this property, attributed to the use of the area by Sun Oil Company and the Defense Supply Center Philadelphia (DSCP). DSCP is a federal facility which is operated by the Defense Logistics Agency. The oil plume was caused by past industrial practices in the area. Sun Oil Company, DSCP and the Pennsylvania Department of Environmental Protection (PADEP) signed an Agreement in 1997 whereby DSCP and Sun Oil would jointly remediate the oil plume beneath South Philadelphia. The Agreement between DSCP, Sun Oil and PADEP expired on August 1, 1999, however, the removal of the oil from the groundwater continues under a PADEP Order issued to DSCP, the U.S. Army, and the Defense Logistics Agency. The military has appealed the PADEP Order. PHA and HUD were concerned about petroleum vapors and any potential health affects on the Passyunk Home residents, and the fact that the agreement had expired during the summer of 1999. PHA had a stake in the oil recovery project because of the potential health affects on the residents and the fact that the hydrocarbon recovery system is located on PHA property.

Region 3 worked with PHA and HUD to ensure that the environmental justice concerns of the residents were addressed. Region 3 wanted to ensure that the oil recovery project did not intensify environmental stressors on the residents. During the summer of 2000, PHA and HUD completed the closure of the homes and the relocation of all the residents.

Region 4

IMC and Arkwright Landfill Superfund Sites, South Carolina. Spartensburg, SC has two adjacent Superfund sites which after being neglected for years, underwent EPA-lead site assessments in 1999 and 2000. Environmental justice staff provided extensive supporting activities to the community and to the Agency's remediation program. Specifically, the Region's

environmental justice staff: (1) interviewed former workers on disposal areas and operations; (2) exchanged information with the community; (3) assisted the community in developing its Environmental Justice Small Grant Work Plan; (4) attended internal strategy meetings with the site team; (5) held numerous conference calls and meetings/presentation with Re-Genesis environmental justice group representatives; (6) commented on technical documents (e.g. ATSDR documents); and (7) continued to ensure public input in the remediation process involving two adjacent Superfund sites. One of the sites may be selected for the Recycling Superfund Sites Initiative. A special local "Superfund Process" training added value to the community knowledge. Regional environmental justice staff worked with Re-Genesis, the lead community organization, to create a "Responsive Revitalization" forum, held with 60 diverse stakeholders (e.g. City, County, landowners, banks,

developers, and EPA). Subsequently, the community was chosen for a Federal Interagency Environmental Justice Demonstration Pilot, called "Cleanup and Revitalization through Collaborative Partnerships, Arkwright and Forest Park Community." The first meeting lead by the federal partners was held in August, 2000 and achieved a participation of 11 other partner groups.

National Relocation Pilot, Escambia Wood Preserving Superfund Site, Florida. The Escambia Treating Company Superfund Site is part of a National Relocation Pilot. To date, EPA has relocated over 90% of single family housing residents. EPA has reimbursed



homeowners for the fair market value of their homes plus a differential to help them buy a new home of their choice. Additionally, EPA has provided moving expense payments to everyone. As for the Escambia Arms Apartments (a government subsidized apartment complex with 200 two and three bedroom units), EPA has provided relocation assistance to about 40% of the residents, as negotiations continue with the owner of the complex.

EPA's relocation assistance has taken the form of down-payment assistance for several residents who elected to move away from the complex on their own, and were found to be eligible for relocation assistance under provisions of the Uniform Relocation Act. A public meeting was held on August 29, 2000 with residents of the Escambia Arms Apartments. The meeting was hosted by the Army Corps of Engineers, EPA and the Pensacola Housing Authority. Agencies discussed the progress of the acquisition of the apartments and the government's plans to commence with the relocation of the remaining residents. The agencies updated residents on the relocation assistance program being offered. Regarding the actual cleanup of the superfund site, to ensure that whatever remedial options proposed are consistent with the beneficial future redevelopment of the area (revitalization and reuse

plans are currently being developed by the Escambia County Community Redevelopment Agency through an EPA grant), EPA postponed issuing a proposed plan for the remedial action for Operable Unit 1 (former facility, the residential neighborhood).

American Creosote Superfund Site, Mississippi. The American Creosote Removal Action is within a predominately low-income, minority community. There was a removal action at the site in the 1980s. A hazard ranking package was prepared to propose the site to the NPL. However, the site did not rank. In 1999, the Emergency Response and Removal Branch (ERRB) began a removal action. As a result of intensive community involvement and valuable input from the community, the site was easily ranked. The primary concern at the site is creosote. Children from the nearby housing project had played in a creosote contaminated pond on the site. The ponds on the site had also been used in the past by a church for baptism. Citizens have voiced concerns because creosote is apparent in the creek that runs next to the site (no longer used for fishing or swimming). A door-to-door campaign was launched to inform the community because the majority of the residents near the site do not receive the local newspaper. The residents are pleased that a superfund removal action has taken place to clean up the site and that there will be a remedial action to clean up the groundwater at the site.

Brownfields Pilot in Columbia, Mississippi. A community partnership between the City, local activists and an environmental justice advocacy group (Jesus People Against Pollution) was formed to implement the Brownfields Assessment Pilot Grant. The partnership created the forum to reunite parties polarized by the Superfund cleanup process which took place at the former Newsom Brothers Site. The partners expanded to include the EPA, Agency for Toxic Substances and Disease Registry, U.S. Housing and Urban Development (HUD), Mississippi Department of Environmental Quality, Mississippi Department of Health, Corps of Engineers, Fannie Mae and the Partnership of Sustainable Brownfields Redevelopment. A charrette (or visioning) workshop was hosted that included a professional planner/facilitator, the residential and business community, local civic leaders, city personnel, HUD and EPA. A master plan for sustainable redevelopment is still under an area where the income level of seventy percent of the residents is below poverty. The community partners applied for "Brownfields Showcase" status for their rural community, in the Spring, 2000. They continue to heighten the need for continued funding.

Opa-Locka Brownfields Task Force, Florida. Region 4's South Florida Office is an active member of the Opa-Locka Brownfields Task Force which has been functioning for approximately three years. Early efforts of the task force were to identify the many parcels of abandoned or underutilized properties within this low-income, predominantly Hispanic and black community. Region 4 has provided targeted site assessments at nine of these parcels and one has received a Phase 2 detailed assessment of contamination which has enabled the city to pursue third party interest in cleanup and redevelopment. The city has also successfully applied for, and been awarded, a

Brownfields Assessment Pilot which will allow them to continue their Brownfields efforts to restore their city. As part of their Brownfields efforts, Region 4 encouraged the city to establish a community outreach subgroup which has had a number of meetings with the public surrounding these sites to encourage input/participation from the public on their concerns relating to the potential contamination and their ideas on reuse.

Region 5

Superfund Jobs Training Initiative in Chicago, Illinois. The Superfund Jobs Training Initiative completed another session in Region 5 at the Dutch Boy Landfill Site in Chicago, IL. This Initiative was made possible through a grant program from the Environmental Protection Agency (EPA) and the National Institute of Environmental Health Sciences (NIEHS) and was the result of collaboration between the EPA, NIEHS, DePaul University, and a number of community training partners. The success of the program was based on the wisdom and foresight of educators at DePaul University and EPA staff. Through the partnerships and diligent efforts, twenty-eight students received specialized training including: 40-hour HAZWOPER certification, Lead and Asbestos Worker training, Superfund Regulatory Overview, Hazardous Site Cleanup Simulations, Critical Thinking and Employability Skills Development, and Life Skills Training (i.e. conflict resolution, team building, self esteem, job readiness, logical reasoning, and environmental vocabulary development). The trainees will be licensed in the State of Illinois (and in Indiana by reciprocity) as asbestos abatement workers and lead abatement workers. This multiple licensing will enhance each trainee's employability and work regularity. The students trained in the Initiative were ethnic minorities between the ages of 18-25 years. After training was completed, EPA and DePaul University hosted a job fair for trainees to provide an opportunity for the qualified community residents to meet and interact with local contractors. This real-life simulated training prepared the students not only for an opportunity to secure jobs in the environmental field, but also provided a decided advantage to persevere in all aspects of their lives.

Region 6

Minority Worker Training Program. The National Institute for Environmental Health Sciences (NIEHS), using EPA funding, has awarded funding to Xavier University in New Orleans, as a subgrantee of Clark Atlanta University, under two cooperative agreements to development and implement two Minority Worker Training Program (MWTP) grants. Both projects have two main goals: (1) work in partnership with unions via apprenticeship programs, local community-based organizations, and local academic institutions to implement a comprehensive education and job training program that will address clean-up and redevelopment in the target areas, and (2) assist the local community colleges and Historical Black Colleges and Universities in promoting worker health and safety through education and training delivered by these academic institutions.

Final Closure and Completion of Post-Closure Plan for Pueblo of Taos Pueblo. The Taos Pueblo has completed closing a 5.4 acre dump utilizing EPA Region 6 Solid Waste Closure/Post Closure Guidance (which is now being used by other Regions). Coordination for the funding, planning, and closing of the dump, technical assistance and review of all documents regarding the final cover and post closure care plan was provided by the Solid Waste Section staff. The coordination effort of this dump was a very significant action because it sets a model for working with several federal agencies and tribes to physically close a dump and have an alternative to open dumping. The Pueblo of Taos Tribal Council has recently approved the construction of a community transfer station as an alternative to operating a landfill.

Tribal Health Issues, Tar Creek Superfund Site, Oklahoma. The Tar Creek Superfund Site is a former lead and zinc mining area of 40 square miles within the former Quapaw Indian Reservation boundary. Approximately 25% of the children have elevated blood lead levels compared to a statewide average of 2%. Major efforts are underway to clean up the Site and protect the population from lead exposures and mining waste. Approximately \$50 million has been spent removing lead-contaminated soil from 1500 residential yards and 28 high access areas (e.g., playgrounds, schoolyards, parks, and other areas where children congregate), plugging 83 abandoned wells to protect the drinking water supply, and constructing diversion diking to protect the surface water. Another approximately \$20 million requiring a state cost share is needed in the next year for remediation of an additional 500 yards and for other remaining work to protect the populace from exposure to lead-contaminated soil.

The Quapaw Tribe powwow grounds and campgrounds were contaminated from mine tailings (locally know as chat) used to floor the camp shelters and to cover walkways and roads. Remediation, consisting of removal of the lead-contaminated soil from the campground, was conducted in late Winter and early Spring 2000. Remediation was completed in the Spring. EPA is funding ATSDR for an extensive lead education and blood-lead screening program at the Site. These efforts include coordination with a health coalition, health care representatives and from local communities and tribes.

Region 8

Arsenic and Lead Contamination in Denver, Colorado. Residential communities in the Vasquez Boulevard/I-70 area are contaminated with arsenic and lead. The residential cleanup was added to the Superfund National Priorities List in July 1999. It is the largest current soil remediation in the national Superfund program with more than 4000 homes, 20,000 residents, largely Hispanic and African American communities. The northern neighborhoods sit in the most polluted zip code in the Denver metropolitan area. There is active community participation through monthly meetings with community representatives and other key stakeholders to review progress. A cleanup plan will

be completed by Fall 2001 and remediation of the soils will likely commence in the Summer of 2002. To address environmental justice concerns at this site, the Environmental Justice Program conducted a day-long workshop on environmental justice for the VB-I70 Working Group. The Environmental Justice Program also participates in the majority of Superfund meetings.

Casper Corrective Action Management Unit, Wyoming. An area adjacent to the Midwest Heights neighborhood in Casper, Wyoming, was the location for oil refining operations from 1913 to 1991. As part of facility closure under a consent decree, BP Amoco proposed to locate a corrective action management unit (CAMU) within 1000 feet of this low-income residential area. The CAMU would serve as a landfill for wastes derived from facility clean up. These wastes would include hazardous wastes, among other types, such as construction debris. The State of Wyoming requested consultation from Region 8's Environmental Justice Program. The region provided a number of consultation and guidance activities, including demographic and environmental justice analyses, consultation with the state and Amoco directly regarding environmental justice and its relationship to Title VI of the Civil Rights Act, guidance on community participation in public meetings and provision of an Environmental Justice Workshop for the community group involved with the clean up effort at the former refinery location. As a result of these consultation activities and community feedback, BP Amoco chose another location for the CAMU, which fit with overall goals for corrective action at the site.

Region 9

Proposed Gregory Canyon Landfill, California. Gregory Canyon Limited proposes to construct and operate a new municipal solid waste landfill and recycling collection center in San Diego County. The landfill was sited based on a San Diego County ballot measure. Previous to the measure, the site had been reviewed twice, and was turned down based on environmental concerns. The proposed landfill is located south of State Route 76 approximately three miles east of Interstate 15, near the San Luis Rey River in San Diego County, California. California law requires that an environmental impact report be prepared to identify all of the potential environmental impacts associated with construction and operation of a landfill at the Gregory Canyon site. There is considerable opposition to the project from the local community, including the Luiseño tribal communities. The proposed landfill would negatively impact tribal sacred sites as well as potentially degrade the last scenic river in southern California. The tribal communities have asked for Region 9 assistance in ensuring that the landfill is not detrimental to the environment. In addition, the Tribes raised this proposed siting as an environmental justice concern. Region 9 is working with the Army Corps of Engineers (Corps) to assist in consultation and coordination between the entities involved. In order for the project to continue, the Corps will need to issue a Clean Water Act Wetlands permit for a portion of the site.

International Problems and Solutions

African Chemicals Management Capacity Building Program. In partnership with U.S. Aid for International Development (AID) and the United Nations Environmental Program (UNEP), EPA developed the African Chemicals Management Capacity Building Program. This program provides chemicals information exchange in Africa to provide Internet access and training to chemicals management decision-makers in Mali, Nigeria, Cote d'Ivoire and Tanzania.

Region 9

Safety Kleen Hazardous Waste Facility-Westmoreland, California. In the second quarter of FY 1999, Region 9 was alerted by environmental justice advocates and organizations of a waste shipment from Cambodia which may have been improperly characterized. The shipment of waste to the Westmoreland, CA Safety Kleen hazardous waste facility (subject of a Title VI Complaint), raised environmental justice concerns with respect to how the Agency handles international waste issues. For several months, Region 9's Environmental Justice Program and Waste Division worked closely with the State Department of Toxic Substances Control (DTSC) and the community to address the environmental justice issues surrounding shipment of waste from Cambodia to a facility in Westmoreland, CA. Ultimately, the waste was not shipped to Westmoreland. A subsequent community meeting was conducted by Region 9, DTSC, and Imperial County Planning and Health Agencies, at the request of the Westmoreland residents. The meeting focused on public participation in permitting process, international waste issues, and Title VI.

Phase out of Lead in Gasoline Project for Sub/Saharan Africa. The Office of International Activities (OIA) is working with the Alliance to End Childhood Lead Poisoning, the World Bank and other partners to encourage the phase out of lead in gasoline in Sub-Saharan Africa. Gasoline used in Africa has the highest content of lead of any in the world. Used in the aging vehicle fleets common in the region, the health impacts, particularly on children and street vendors, are severe. EPA's partnership with the United Nations Environmental Program (UNEP) provides Internet access to officials tasked with managing pesticides and other chemicals. OIA is piloting this effort in four countries: Mali, Nigeria, C'ote d'Ivoire and Tanzania. While the pilots will improve information capacity for the sound management of chemicals to government officials only, later stages of the program will bring in many more African countries, a wide range of stakeholders, and will include a public education component.

Mexican Border Problems and Solutions

Training of Health Professionals Along the US/Mexico Border. As part of the effort to improve the quality of health related environmental issues along the border, EPA entered into an Interagency Agreement to support environmental health training and surveillance activities on the U.S.-Mexico border. Through training, lay community health workers (promotoras) and multi-disciplinary primary care clinicians will learn to better recognize, understand, and manage illnesses related to exposure to environmental health hazards. This training will provide information on exposure to toxic substances found in air, water, soil, as well as basic sanitation practices. The program will be accomplished by developing a two-track training curriculum, one for promotoras, and one for multi-disciplinary clinicians, which includes implementing a variety of didactic and clinical training activities.

Region 6

Texas and New Mexico Colonia Programs. Beginning in FY 93 through FY 98, Region 6 awarded \$40.2 million to the New Mexico Environment Department and \$315.3 million to the Texas Water Development Board. The funds were awarded to construct Colonia drinking water and wastewater treatment facilities as well as provide low interest loans to colonia residents for installing indoor plumbing. Public health and environmental problems have been created by the lack of safe drinking water and sewer services of unincorporated communities located along the U.S./Mexico Border. These small communities, referred to as "colonia," are often highly impoverished areas, characterized by substandard housing and poor living conditions. They often lack basic services, including drinking water, sewer, drainage, electricity and paved roads. To date, approximately 444 colonia in Texas alone, have been assisted with these funds. A considerable number of colonia are now in the planning stages for infrastructure projects.

Texas and New Mexico Colonia Strike Force Grants. To date, Region 6 has provided more than \$450,000 in grant funds to the Texas and New Mexico Attorney General's offices which takes action against unlawful development along the U.S./Mexico Border where developers fail to provide proper infrastructure for development which results in poor living conditions and potential health hazards in the colonia. These funds are used to conduct investigations of this type of activity. The strike force brings lawsuits against colonia developers under a variety of laws in order to protect the public health of colonia residents. The colonia strike force also seeks monetary judgement against developers to compensate local governments for the cost of providing infrastructure neglected by the developers.

Support for Mexico Border Communities. To increase awareness of environmental justice outside of the Agency, Region 9 has worked closely with communities in the Border Region (San Diego, Tijuana, Ensenada, El Paso-Ciudad Juarez, Nogales, AZ, Douglas, AZ). Region 9 continues to conduct regular face-to-face meetings with various community groups, to discuss environmental justice concerns. Grants have been awarded to two organizations working on environmental justice issues in the Border Region. The Imperial Valley College Project New River/New Hope is an environmental education project, and the Tucson, Arizona BorderLinks project Developing Grassroots Leaders in Response to Cross Border Environmental Crisis focuses on the development of women's leadership.

EPA-sponsored public participation and environmental justice training programs seek to improve federal, state and local, and tribal governments, industry, and community stakeholders' understanding of what and how the environmental laws are working to protect the environment and public health of all communities in our nation. With this increased understanding, the various stakeholders are better positioned to identify the opportunities for collaborative problem-solving to address the environmental justice concerns. EPA has witnessed the growth in the number of stakeholders who recognize the benefits of, and, therefore, seek opportunities to work collaboratively in the decision-making processes. The following is a discussion of some of the public participation and environmental justice training initiatives which support this approach to problem-solving.

Public Participation Initiatives

Public Involvement In Environmental Permits: A Reference Guide. This document, completed August 2000, was developed to provide a resource for state program staffs to enhance their public participation efforts. However, it can also be used by the public as a resource to learn about how they can engage themselves in the permitting process. This reference guide summarizes the major permitting programs under the Clean Air Act, Clean Water Act, Safe Drinking Water Act, and the Resource Conservation and Recovery Act. It also gives an overview of the core public involvement requirements in the various permitting programs. Included in the reference guide are best practices and a model plan for implementing effective public participation activities under the various programs, a compendium of additional resources, and contacts for use in implementation. In drafting the reference guide, the Agency consulted with key partners, including advisory groups, on early drafts. Stakeholder meetings were held in the District of Columbia and Houston, Texas to obtain comments from a variety of interests, such as, environmental and community groups, state associations, national associations, state and regional regulators, and industry. The Guide can be found at the following web address: www.epa.gov/permits

The University-based Hazardous Substance Research Centers Program. The university-based Hazardous Substance Research Centers Program has been supporting two (2) outreach and education initiatives for several years. The Technical Outreach Services for Communities Program (TOSC) began in 1995 and the Technical Assistance to Brownfields Program (TAB) formally began in 1998. Funded jointly by the Office of Research and Development (ORD) and the Superfund Office, these ongoing programs provide independent, scientific information to many under-served, overburdened, and low-income communities across the country through a network of over 25 colleges and universities. The goal is to build the community's capacity to participate in environmental

decisionmaking. For a listing of participating universities, communities, and educational modules, please visit the following web address: www.toscprogram.org

Environmental Justice Training Activities

EPA Training Collaborative. A new Environmental Justice Training Collaborative is being organized. The Office of Environmental Justice (OEJ) has played a leadership role in founding and funding the newly established Environmental Justice Training Collaborative. This organization provides quality environmental justice training, and consultative assistance in development of environmental justice related curriculum. It also serves a central networking and information dissemination hub for states and tribes, EPA, other federal agencies, community groups, academics, and increasingly industry. Thus far membership include all ten EPA regions, headquarters offices, and eight states (including, California, New York, and New Hampshire), among others.

Region 4

Teacher Environmental Institute. Region 4 staff and universities under EPA grants coordinated five (5) Teachers Environmental Institutes to provide educators with environmental and environmental justice knowledge and skills. About 230 educators were trained, and as a result, potentially 180,000 students will be affected. Florida A & M University; North Carolina State University- Medical University of South Carolina and Spelman College played a lead role over the past two years. Region 4 staff from cross-divisional programs participated as guest lecturers. environmental justice staff coordinated a site tour visit to the Anniston polychlorinated biphenyls Superfund site for teachers in June 2000.

EPA/Shaw University Research Apprenticeship Program for Culturally Diverse High School Students. The objective of the EPA/Shaw University Research Apprenticeship Program for Culturally Diverse High School Students is to encourage students from culturally diverse backgrounds to pursue advanced degrees in math, science, and engineering. The program was initiated in 1990 as a cooperative agreement. Students in the Research Apprenticeship Program must live in Wake County, NC and be in grades 9 through 12. There are currently 31 students in the program, and eight rising 9th graders are accepted into the program annually. In the spring of 1999, there were 78 applicants for the eight positions. The students must maintain high academic performance in high school in order to remain in the program. As of June 1999, 40 students had completed the program and graduated from high school, and 100% of these students have entered college. Nearly 90% of the students in college are majoring in either science, math, or engineering; and more than a half a million dollars has been awarded to program participants in college

scholarships and grants. The rising 12th graders serve as apprentices with mentors at EPA during the 6 week summer program, during which time they work in an actual research setting with an EPA scientist. Student projects in 1999 included: Comparison of 3 Buffer Systems for the Extraction of ACHE Activity from Rat Tissues; Role of the *GSTTI-I* Gene and the Risk for Stomach Cancer; Immunohistochemical Localization of Proteins in Embryos; Analysis of Heart Rate, Concentration, and Temperature versus Time Through Matlab; The Conversion of the EPA Annex Waste Management Storage Facility from a Conditionally Exempt Small Quantity Generator to a Large Quantity Generator; The Analysis of Shaped Behavior in Laboratory Rats; and Genotoxicity of Bromobenzene in Mouse Splenocytes as Measured by the Cytochalasin B Binucleate and Comet Assays.

Region 10

Environmental Justice Law and Policy Seminar. The Office of Civil Rights and Environmental Justice (OCREJ) and The Urban League of Portland team-taught an Environmental Justice Law and Policy seminar at Northwestern School of Law, Lewis and Clark College during Winter Term 1999. The 15-week seminar emphasized public participation, and community members were invited to attend and develop collaborative relationships with the 20 law students enrolled in the class. Legal research and field studies projects, proposed by OCREJ's environmental justice community contacts (representing community and neighborhood groups, community service organizations, universities, industry, government, medical/health, legal and media stakeholders) were selected by students who worked with community mentors. The seminar helped to: (1) develop the environmental justice knowledge base of the community residents and students; (2) facilitate environmental justice networking between communities and law school graduates; (3) meet the requests of universities for increased EPA involvement in their programs; and (4) support the Region 9 recruitment strategy.

Interagency Training

Region 3

Interagency Environmental Justice Training. As part of the Environmental Issues Seminars, and interagency cooperation, Region 3's Office of Enforcement, Compliance and Environmental Justice (OECEJ), and a representative from the Superfund program, conducted a series of environmental justice training sessions at the Environmental Policy Institute. During these sessions, Region 3 case studies and experiences were used as a backdrop for discussions of the history of the environmental justice movement in the U.S., different perspectives on the environmental justice movement, and policy and guidance issues. The audience for these sessions were managers from most federal Agencies. Since this training began, more than 500 managers have taken the training.

GIS Demographic Mapper. The user friendly GIS mapping tool, developed by Region 3 in 1996, continues to be refined. This Arc View-based screening tool provides vital demographic information for any area in question, and allows the user to better understand and characterize areas of concern. Presentations on the mapper and its various applications in the environmental justice arena have been made for the states of Maryland, Delaware, and Pennsylvania; the cities of Philadelphia and Wilmington; EPA Region 7; the Federal Law Enforcement Training Center; and the Republic of South Africa. Copies of the application were requested by the Department of the Interior, which has in turn forwarded the application to other Federal agencies for evaluation and comment.

Region 8

Environmental Justice Workshop. The Region 8 Workshop is designed to increase understanding of a complex issue and improve clarity about environmental justice concepts and applications. To date, Region 8 has presented it 37 times, to a total of 748 participants. Between 1/99-8/00, the workshop was presented to a total of 394 participants, including other federal agencies such as the US Army Corps of Engineers, the US Fish and Wildlife Service, and the Southwest Strategy, a coalition of federal and state agencies. Other participants included representatives of community organizations, industry, and the Environmental Council of States. Region 8 continues to conduct the environmental justice workshop in response to external requests and collaborates with other regions when the requests come from outside of the region.

Region 10

Interagency Regulatory Analysis Committee. A representative from Region 10, OCREJ was a presenter at the Interagency Regulatory Analysis Committee (IRAC) of King County, Washington on October 27, 1999. The mission of IRAC is to create a more effective and efficient means of protecting public health and safety through coordination of regulatory agencies. Approximately 30 representatives attended. The presentation focused on education and understanding various levels of environmental problems and regulations, environmental justice, the environmental justice grants programs, and the work of environmental justice grantees.

Forest Service Environmental Justice Training/Workshop. A member of the Environmental Justice Core Group, stationed in the Region 10 Alaska Operations Office, participated in an environmental justice workshop in Ketchikan, Alaska, hosted by the Central Council of the Tlingit and Haida Indian Tribes of Alaska and the U.S. Forest Service. The workshop focused on identifying and addressing disproportionately high and adverse human health or environmental affects of federal agency policies and decisions on minority and low income populations. The Region 10 representative

participated on a panel discussion focusing on subsistence hunting and fishing by Native Americans and the potential disproportionate impacts from such a lifestyle.

State Training

Region 3

All-States Environmental Justice Conferences. During 1999 and 2000, Region 3's Office of Enforcement, Compliance and Environmental Justice (OECEJ) convened two (2) All-States Environmental Justice Conferences with all of the states, and the District of Columbia, in Region 3. The purpose of the conference was to create a forum to discuss environmental justice guidance, policies, real world problems and solutions. The conferences were a success in that they opened a continuing dialogue between EPA and the states on issues of environmental justice. Since July 1999, EPA and the states have held regularly scheduled monthly conference calls to continue the dialogue, share experiences and identify and find solutions to real environmental justice issues.

Region 8

State Agencies. Region 8 provided environmental justice training to several state agencies, including Utah Department of Transportation, Colorado Department of Public Health and Environment, and Wyoming Department of Environmental Quality. Participants in these workshops included state employees, industry, and community representatives.

Tribal Training

Environmental Planning for Small Native American Communities. This three (3) day seminar covers all aspects of environmental planning, including wastewater treatment, drinking water, solid waste management, non-point source pollution, pollution prevention, and compliance. There are also modules on identifying environmental problems in the community and promoting community participation in environmental issues. In addition to standard lecture, the course includes hands-on laboratory experiments, tours of local environmental facilities, and exchange of ideas and experiences among participants. The class was developed and delivered by Montana Tech University, with guest lecturers from state environmental agencies, EPA, and tribal personnel. The target audience is small Native American tribes without sophisticated infrastructure or extensive staff. The seminar was offered in Albuquerque, NM in 1999 and Muskogee, OK in 2000, with plans for offering it a third time in Alaska. All seminar modules and materials are available through the Montana Tech Environmental Learning Community at http://multimedia.mtech.edu/elc.

Tribal Training Module on Watershed Monitoring Design. Under a cooperative agreement with the River Network, EPA is currently in the process of producing a training module (expected by the end of 2000) consisting of a guidebook and workshop materials to introduce tribes to the principles of designing a water quality monitoring program, generating credible data, and using their data effectively. The goal of this project is to build capacity within tribes to design, manage, and implement their own water quality monitoring programs, and to generate data they can use to make their own planning decisions and better meet assessment requirements under the Clean Water Act. The training module will be integrated into other existing tribal training programs, such as Tribal Nonpoint Source Pollution Workshops and Tribal Watershed Training.

Region 1

Tribal Environmental Training Conference - 3rd Annual. Region 1 is continuing to develop and foster integrated federal agency initiatives and build partnerships to address environmental justice issues of concern. On March 27-29, 2000, the 3rd Annual New England Tribal Environmental Training Conference was held in Hyannis, MA on Cape Cod. The conference provided a unique opportunity for tribes to meet with federal agencies to build partnerships that will work toward common goals in protecting the environment. The goal of the conference was to enhance protection of the health and environment of Indian Country through partnering, science, and education on traditional Indian values.

The conference was hosted by the Wampanoag Tribe of Gay Head (Aquinnah) and entitled "Integrating Native Culture with Modem Technology: Protecting Mother Earth for our Children". Participants included the Passamaquoddy Indian Township, Passamaquoddy Pleasant Point, Penobscot Nation, Houlton Band of Maliseet, Aroostook Band of Micmac, Narragansett Tribe, Mashantucket Pequot Tribe, Mohegan Tribe, the US EPA-New England, Natural Resource Conservation Service, Fish and Wildlife Service and the Department of Defense.

Region 8

Tribal Elders NEPA/Environmental Justice Training. At the request of the Lower Brule Sioux Tribe, in February 1999, Region 8 staff from environmental justice and NEPA offices presented information on environmental justice and NEPA to a gathering of about 70 tribal elders representing the Sioux Tribes along the main stem of the Missouri River.

EPA-sponsored outreach initiatives build on the Agency's public participation and training initiatives. The wide variety of outreach efforts serve to stimulate stakeholder involvement in the efforts to provide for environmental justice. For the past couple of years, the OEJ and regional environmental justice programs have been sponsoring these outreach programs. The majority of current projects involve EPA outreach to, and the involvement of, local communities, joint investigations of specific areas of concern, community capacity-building, and development of workable solutions. The following is a discussion of some of these environmental justice initiatives.

Outreach

Environmental Justice: Strengthening the Bridge Between Economic Development and Sustainable Communities. With support from the Congressional Black Caucus (CBC), EPA partnered with the Department of Justice to coordinate this major conference. Over 220 multistakeholders attended, and as a result of this meeting, proceedings and a videotape were published and presented at the 29th Annual CBC Legislative Session (Fall, 1999). The Medical University of South Carolina and South Carolina University were the academic partners who helped plan and coordinate the meeting. The CBC subsequently established an EJ Braintrust and as an outgrowth of recommendations, a National Environmental Policy Commission was formed to identify environmental issues and to articulate a range of policy alternatives for consideration by policy makers. Also, regional "Listening Sessions" on EJ issues were started during FY 2000. Another result was the renewed interest in the re-establishment of the Federal Interagency Working Group, coordinated by EPA, Headquarters.

National Watershed Outreach Conference. The Office of Wetlands, Oceans, and Watersheds and the Office of Ground Water and Drinking Water cosponsored the National Watershed Outreach Conference from April 17-19, 2000 in San Diego, California. This conference was also sponsored by the Aquatic Outreach Institute (Richmond, California), the University of California Cooperative Extension/Sea Grant Extension Program, and the County of San Diego Watershed Working Group. The conference provided a forum for a variety of stakeholders to share various outreach techniques related to a wide range of watershed issues and motivated attendees to explore both traditional and nontraditional outreach techniques. There were a number of sessions at the conference that focused on outreach techniques that target minority or disadvantaged communities. For example, one session focused on developing strategies for soliciting Latino communities in watershed education by learning how to adapt resources to Latino needs and interests; and another session focused on involving at-risk urban youth, many of which who have been through the juvenile court system, in wetland restoration activities.

Wetlands Education Activities. Wetlands Division staff presented Environmental Education programs to several groups of disadvantaged students, including Junior Rangers and students from Virginia and Washington, DC schools. The Wetlands Division also staffed exhibits and several events in the area, including the Kingman Lake dedication project which is staffed by Community Conservation Corps youth. The Wetlands Division also participated in EPA's partnership with the Cesar Chavez School on environmental projects.

Region 1

Hartford, CT. Hartford has a population of approximately 130,000 people living in an area of 18.4 square miles, sub-divided into 17 neighborhoods. Minority residents in Hartford comprise 70% of the population and also has the lowest per capita income in Connecticut at \$24,000. Childhood lead poisoning rates in Hartford are at 13 percent, twice the State average. The City of Hartford declared an Asthma Emergency due to alarming asthma rates and the fact that childhood asthma is the leading cause of school absenteeism and hospitalization. Region 1 worked with community partners to host an Asthma Education Forum on June 22, 2000 that brought over 100 people together to discuss the issue and identify opportunities to improve community access to information and services. Region 1 is also working with community and academic partners in Hartford to create an interactive, multilingual environmental education and information web page to provide increased public access to critical environmental and public health problems facing local residents.

Region 2

Environmental Justice Enforcement Workshop in NYC. This educational workshop was designed to empower local citizens in New York City (NYC) to recognize and report environmental violations and demonstrate how citizen complaints can result in enforcement actions against violators. Citizens can have a positive impact on their communities by helping to deter violators through the citizen complaint process. In addition, workshop handouts were provided to promote community awareness of the strong EPA/State inspection and enforcement presence in the aforementioned five targeted NYC communities. Regulatory agency program contacts, hotline numbers, and Internet web sites were also provided to the community. Hosted by Region 2 and the Department of Justice, the workshop was held in fulfillment of an EPA commitment made at the March 6, 1999 EPA/White House Council on Environmental Quality forum on environmental justice in NYC. Very positive feedback was received from the public and workshop panelists.

Community Based Environmental Protection (CBEP) Program. Region 2 is committed to supporting environmental protection at the local level. In this matter, we have developed a web site that provides easy access to a broad set of resources for communities, including tools for learning about and improving the environment, directories of community grants and financial assistance, as well as links to EPA contacts and other information sources. The web site can be found at: http://www.epa.gov/region02/cgp/cgphmpg

Mercury Reduction and Pollution Prevention for Federal Facilities in the

Health Care Sector Roundtable. Region 2 has undertaken an initiative to implement a memorandum of agreement with federal agencies throughout the region to address mercury concerns. In order to start this effort, EPA elected to do a Federal Facilities Roundtable on February 22, 2000. EPA staff also developed a work group which consisted of EPA, state, county and local government, medical school environmental health and safety staff, university medical school staff, and professional and trade organizations in the health care sector. This group was instrumental in providing information sources, and concepts that were used in developing the first program and plans for future programs. The group became a conduit for information in the field, sources of documents and experts, and ultimately sources for future events to be held throughout New York State.

Region 4

Environmental Justice Workshop: Making Environmental Justice Work in Georgia. Region 4's Air, Pesticides, and Toxics Management Division (APTMD) periodically coordinates with the regional transportation partners on environmental justice issues related to transportation plans and air quality. As part of this coordination and cooperation, APTMD participated in an environmental justice workshop hosted by the United States Department of Transportation, Federal Highway Administration - Georgia Division, and the Georgia Department of Transportation. The purpose of this workshop was to provide transportation decision-makers with conceptual tools for effectively implementing environmental justice principles in day-to-day decision-making. The Federal Highway Administration Southern Resource Center Director provided a history of transportation-related activities that involved environmental justice issues. The presentation chronicled how, although the elements of environmental justice have long been incorporated into the planning regulation, interpretation of this regulation has been flexible enough that environmental justice has not always been considered. A video was shown which demonstrated how an environmental "injustice" was mitigated through the use of county funds and compromises to address citizens concerns. Other presentations provided examples of how to incorporate environmental justice considerations into the transportation planning process. Many of the presentations emphasized that environmental justice considerations are a necessary component of good public involvement.

Citizen Training on Title V Air Permitting. Region 4 co-hosted a workshop on October 21-22, 2000 in Atlanta, GA to train citizens on public participation opportunities in the Title V air permit issuance process. Planning for the Region 4 workshop was coordinated by a diverse committee consisting of representatives from EPA, the State of Georgia, and seven citizens and environmental groups located in the Southeast. The purpose of the workshop was to introduce citizens to the Title V air permitting process; give citizens tools, skills, and reference materials to help them review proposed Title V permits and offer meaningful comments; explain the options available to citizens to participate in the Title V process; and, explain the tribal, state and federal roles in Title V permitting. Notice of this workshop was mailed to approximately 100 environmental justice citizens, and environmental organizations throughout the eight states in Region 4 to encourage attendance.

Brownfields Outreach in Southeast Florida. Region 4's South Florida Office, in coordination with the Regional Planning Councils, Florida Department of Environmental Protection, and local county Brownfields Coordinators, has been meeting with local officials, community leaders, and the public in numerous cities throughout the Southeast Florida Eastward Ho! corridor to inform them of the many incentives available and potential benefits to the community through federal, state, and local Brownfields assistance into their overall community revitalization efforts. This increased awareness has resulted in the successful award of several Brownfields Assessment Pilots to local government and the completion of numerous Targeted Brownfields Assessments to clarify contamination levels at sites throughout the corridor. This information enables the communities to pursue third party cleanup and redevelopment of these abandoned parcels.

Environmental Health Fair. Environmental

justice staff spearheaded a cross-divisional team to participate in a community health fair in a local disadvantaged community (Carver Homes area, Atlanta). The fair was coordinated by Morehouse School of Medicine and had several nonprofits and government agencies performing outreach (August 1999).

Region 7

Environmental Justice Forum. Over 200 participants attended the Environmental Justice Forum held on August 10, 2000 in Kansas City, Kansas. Among the stakeholders in attendance at the forum included: federal, state, and local governments; non-profit organizations; environmental grassroot organizations; academia; tribal groups; transportation associations; and engineering firms. The Forum also included displays by current and past EPA environmental justice grant recipients and EPA programs. Exhibits included: Metropolitan Energy Center, Operation SafeStreet, Nebraska Recycling Center, Bridging the Gap, the Wyman Center, Inc., LeadBusters, and EPA's Environmental Justice Program, Brownfields Program, and the Toxic Substances and Control Act

Program. The purpose of the Environmental Justice Forum was to allow the EPA an opportunity to assert its belief that partnerships between stakeholder groups is vital in the pursuit of environmental justice. The Forum was a result of two meetings held in May 2000 with two different stakeholder groups: (1) community environmental health organizations; and (2) federal agencies with environmental justice responsibility, and their request to continue to engage in dialogue. The goal of the Forum was to bring together various regional stakeholders, policy and decisionmakers, and community members to learn about environmental justice and to build partnerships

Region 8

Natural Resources Environmental Justice Symposium. This symposium was presented by the Natural Resources Law Center (NRLC) of the University of Colorado at Boulder, in cooperation with Region 8's Environmental Justice Program and Colorado People's Environmental and Economic Network (COPEEN). The symposium focused on environmental justice and natural resources management. The program consisted of a colloquium series, a book of collected essays, and a conference/workshop. Region 8's environmental justice Program provided advice to the NRLC and views the issue of natural resources and environmental justice as critical for the West. The Symposium represents an important outcome of the developing partnership between Region 8 and the Law Center. Additionally, an environmental justice analysis of a proposed flood control project at Devils Lake, North Dakota, prepared by a Region 8 post-doctoral sociologist intern, was among the presentations delivered at the workshop.

Region 10

Initiative on Asian American and Pacific Islanders. On May 10, 2000, as part of the White House Initiative on Asian Americans and Pacific Islanders, Region 10 hosted a meeting with members of various Asian and Pacific Islander community groups. Also attending the meeting were representatives from Washington State's Governor's office, the Presidential Commission on Asian/Pacific Islander Affairs, the Washington State Commission on Asian and Pacific American Affairs, along with Region 10 staff and managers. EPA reported on a study conducted to determine the effect of toxic substances on seafood resources used by Asian/Pacific Islander communities.

Networking for Communities. Region 10's Office of Civil Rights and Environmental Justice hosted a networking meeting designed for environmental justice advocates in Western Washington to expand their professional resources and connections regarding environmental justice in the Seattle and Tacoma area, entitled "Environmental Justice Partners Joining Together." The purpose of the meeting was to learn how environmental justice professionals throughout Western Washington can work together to address environmental justice issues. In attendance were representatives from Washington Department of Ecology, Washington Toxics Coalition, Washington Department of

Transportation, Seattle King County Department of Health, Community Coalition for Environmental Justice, El Centro De la Raza, and Refugee Federation Services Center.

Tribal Consultation

Guide on Tribal Consultation and Public Participation. The National Environmental Justice Advisory Council, a federal advisory council to the EPA, prepared a Guide on "Consultation and Collaboration with Indian Tribal governments and the Public Participation of Indigenous Groups and Tribal Members in Environmental Decision Making," for EPA and other stakeholders to better understand the unique political status of federally recognized tribes, and how federal agencies and other governments are to work with tribes on a government to government basis. The document also explains the differences between consultation with tribal governments and public participation. A copy of the Guide can be found at the following web address: http://www.epa.gov/oeca/main/ej/fgconsult.html

International Outreach

Roundtable on Environmental Justice on the U.S. Mexico Border. On August 19-21,1999, EPA sponsored the Roundtable on Environmental Justice on the U.S. Mexico Border, in National City, California. Over two hundred participants from U.S.-Mexico border communities and organizations, the National Environmental Justice Advisory Council's International and Enforcement Subcommittees, EPA and other U.S. government officials along with Mexican counterparts dialogued on quality of life issues on the border. The Roundtable included an all day site tour, public comment periods, a senior EPA panel, a panel of the Region 6 and Region 9 border offices, and four (4) breakout sessions: (1) Environmental Justice and Labor; (2) Immigration; (3) Trade and Environment; and (4) Indigenous Peoples Issues and Health. The last morning included the presentation of recommendations from the break-out groups.

Categorizing the recommendations into short, medium and long term goals, EPA responded to over 40 of the recommendations within 30 days after the Roundtable and continues to work on the more complex recommendations, several involving negotiations with the government of Mexico. Subcommittee members and environmental justice representatives have worked closely with EPA invoking the concerns of the environmental justice community and offering comments in the early developing stages of newly formed work plans, projects and policies that address Roundtable recommendations.

South Africa Work Group. EPA implemented the recommendation of the South Africa Work Group (SAWG) of the International Subcommittee of the National Environmental Justice Advisory Council (NEJAC) to "link environmental justice groups in the U.S. with South Africa Groups who

Chapter 4

Outreach Initiatives

are addressing similar issues." In May 2000, EPA hosted delegates representing the South Africa environmental justice community for an intensive program in the southeastern United States. The delegates spent ten days visiting communities that face environmental justice challenges similar to those in South Africa. There was a one day "Lessons Learned" session from the U.S. experience and a discussion of what still needs to be achieved. After the session on the history of NEJAC, delegates attended the entire NEJAC meeting where they observed the process and met experts and activists from around the country. The Agency is assisting the South Africans in developing proposals and conducting other follow-up work.

Assessment Methodologies, Assessment Guidance, and Community Assessments

Over the last two years, EPA has seen a growth in the number and type of environmental justice assessment methodologies and community-based studies which are beginning to help the Agency, and other interested parties, better understand the extent and nature of the environmental and public health concerns facing low-income and/or minority communities. These assessment methodologies and community-based studies are helping the EPA and other federal agencies improve their efforts to identify, assess, prioritize, and allocate resources to review those concerns.

The Agency is also working to enhance the usefulness and delivery of its environmental information to all segments of the public. By continuing to seek opportunities to provide information through various database systems, educational materials, and analytic tools, the Agency expects these data and tools to be used by communities to participate more meaningfully in the environmental decision- making process.

The following chapter presents a brief synopsis of activities that have been performed or are currently in place to build upon the Agency's ability to quantitatively identify and address allegations of environmental injustice.

Assessment Methodologies

Air Screening Manual for Communities. EPA is embarking on a cross-program collaborative effort to develop a manual to help communities interested in conducting a risk-based air-screening exercise. The Air Screening How-To Manual will help communities develop a better understanding of their local air quality and identify priorities for making improvements. The manual will lay out a step-by-step process for improving local air quality, from forming a partnership to identifying pollution prevention opportunities for addressing community priorities. The manual will be designed to build the long-term capacity of communities to understand and address air quality issues.

Work on the manual will be based on the experiences of the Air Committee of the Baltimore Community Environmental Partnership. The Air Committee, a broad partnership of Baltimore residents, industry, and governments, worked together for three (3) years to develop and implement a six-step (6) screening methodology to review the toxic releases from the multiple facilities located in and around the industrial neighborhoods of south Baltimore. The manual will incorporate the lessons learned in Baltimore and the comments of peer reviewers to refine and expand the methodology developed by the Air Committee. A case study summarizing the work of the Air Committee in both printed and electronic versions is now available.

The development of an effective manual will require further community input. The Agency team working on the manual is now looking for community stakeholders and other partners to help with the development of the manual.

Assessment Methodologies, Assessment Guidance, and Community Assessments

Region 2

Chicago Cumulative Risk Initiative. In response to a Chicago Legal Clinic Petition filed in 1996 on behalf of 11 community advocacy groups, EPA began the Chicago Cumulative Risk Initiative (CCRI). This effort is designed to identify and address issues of cumulative environmental loading and health risks from multiple sources in Cook County, Illinois and Lake County, Indiana. Several useful tools for this initiative will be developed in partnership with both the community stakeholders as well as the regulatory stakeholders, including federal, state and local government agencies. One of the tools to be developed will be an environmental loadings profile, which summarizes all available multimedia data, including emissions and ambient data. This loadings profile is currently undergoing peer review. In addition, a user-friendly database is being developed that will facilitate integration of available environmental data for the two (2) county area. The partnership is also developing a Cumulative Risk Screening tool that will focus on air sources only. This cumulative risk screening tool will evaluate environmental databases of both air emissions and ambient air data. along with toxicity weighting factors, to identify areas characterized by high hazard. The screening tool will also consider available health data in order to identify susceptible populations, focusing on children, especially those with asthma, elevated blood lead concentrations or leukemia. This cumulative risk screening document will tentatively be available for peer review by the end of calendar year 2000. The stakeholders are also currently developing communication, outreach and utilization strategies for the tools developed by the initiative.

Environmental Justice GIS Application.

The Region 2 Environmental Justice Application is an evolving ArcView application that provides a step-by-step tool for evaluating selected areas for potential environmental justice concern based on a demographic criteria and a suite of indicators of environmental burden (environmental load profile). Environmental justice potential based on demographic characteristics is determined based on statistical comparison between the selected community of concern and a series of statistical reference areas. 1990 Census block group data are used for this determination. Assessment of disproportionate burden is based on a set of indicators in the Environmental Load Profile, which currently contains the following elements: (1) Relative Burden Analysis based on data from TRI; (2) Facility Density vs Population Density; (3) Ambient Air Quality; and (4) Land Use. Additional indicators will be added as data become available. The application is a work in progress pending public release of the Region 2 Policy on Identifying environmental justice areas and development of a statistical methodology for defining environmental justice areas. Statistical method development is a cooperative effort among Region 2 staff, and researchers from EMSL Las Vegas and Hunter College. Eventually the tool will be migrated from an ArcView application to a webbased tool.

Assessment Methodologies, Assessment Guidance, and Community Assessments

Region 6

Federal Facilities Assessments. Evaluation of environmental risks from federal facilities require assessments of several unique issues. Toxicities from spent munitions, low level nuclear waste, air and water emissions from aircraft operations and maintenance, and land destruction are a few of these issues. Part of the assessment of federal facilities includes the region's Environmental Justice Index. The economics, housing, and minority representation of service personnel is different from the general population. The Region's Environmental Justice Index is used to identify these different stressors and demographics. In partnership with Region 6, the Department of Defense will have two Army facilities pilot the environmental assessment GIS screening methodology, which includes evaluation of environmental justice and other socioeconomic parameters.

Healthy Environments and Living Places (HELP) For Kids: The methodologies and material for the Healthy Environments and Living Places (HELP) for Kids Project were finalized. HELP for Kids is a program that supplies local community organizations with the material and training to assist community members in evaluating their homes, home-based child care, or schools for the environmental threats their children are exposed to on a day-to-day basis. All environmental issues inside these three (3) environments are evaluated, including indoor air quality, lead-based paint, asthma, pesticides, mold, hazardous household materials, and radon. The program was pilot tested in Albuquerque, New Mexico with the American Lung Association where training and several investigations were conducted. A grant was given to a local non-profit organization, the Community Health Partnership, to continue the program in a low-income, Spanish-speaking area of Albuquerque.

Region 10

Geo-referenced Environmental and Health Databases. In support of efforts to identify communities that receive disproportionate impacts, the Office of Civil Rights and Environmental Justice (OCREJ) has worked with Oregon Department of Environmental Quality (ODEQ), Washington Department of Health and OEA to identify and acquire geo-referenced environmental and health databases for the states of Oregon and Washington. This information will augment databases currently available through the Regional GIS mapping program, providing information on health and environmental impacts normally residing in state and local environmental agency databases.

Assessment Methodologies, Assessment Guidance, and Community Assessments

Community/Site Specific Assessments

Region 4

Project XL - Atlantic Steel Redevelopment. Environmental justice staff created a special Environmental Justice Focus Group (comprised of local environmental and environmental justice advocates) to ensure compliance with the Executive Order on Environmental Justice 12898 and help identify/address community concerns regarding the proposed redevelopment plan and the Project XL Agreement. The Project XL Team (Region 4 management and staff) responded to a couple of key issues: water management, and revisiting the Superfund assessment of an adjacent EPA Removal site. Environmental justice staff contributed to the development of an environmental justice methodology that was used in the NEPA Environmental Assessment

Region 5

Stormwater Management Effort in the Metro East Area. - In August, September, and October 1999, Gateway Team members attended a series of meetings of the Metro East Regional Stormwater Committee. The Committee, made up of representatives from local, state, and federal government, exists to solve water quantity and quality problems that are a result of stormwater in the Metro East St. Louis area. The Gateway Team has facilitated the process of creating a strategic plan which not only represents the Committee's goals but strives to create a regional stormwater implementation plan. This document will: (1) educate and bring a vision to the greater community; (2) initiate assistance in carrying out stormwater goals; (3) serve as the Committee's recommendation at the state and county levels; and (4) showcase past collaborative stormwater efforts initiated by Committee members. The document is planned for completion by the end of 2000 and the objective is to disseminate the document to the larger community for input via public meetings and forums which the Gateway Team will facilitate. The Gateway Team began concentrating on the stormwater effort due to community concerns and as part of its overall work to pursue sustainable growth principles in the Metro East St. Louis area.

Region 6

Dioxin Exposure Investigation. In December 1998, the Agency for Toxic Substances and Disease

Assessment Methodologies, Assessment Guidance, and Community Assessments

Registry (ATSDR) conducted an Exposure Investigation (EI). The purpose of the EI was to determine if there was evidence of exposure to dioxins in Mossville, Louisiana residents. Blood samples were collected from 28 community residents and were analyzed for chlorinated dibenzodioxins (CDDs), chlorinated dibenzofurans (CDFs), and coplaner polychlorinated biphenyls (PCBs). A limited investigation of environmental contamination was also conducted: four surface soil samples and two chicken eggs were collected and analyzed for CDDs and CDFs. A breast milk sample from one resident was also analyzed. ATSDR, the Louisiana Department of Health and Hospitals (LDHH), LDEQ, and EPA is currently involved in a multi-agency effort to determine the source and extent of the high serum dioxin levels.

Citizens' Air Monitoring "Bucket Brigade." Region 6 awarded a grant to a Calcasieu Parish environmental action group in FY99 in the amount of \$50,000 to be used for activities related to air monitoring and analyses via the bucket brigade. The bucket brigade is a community-based air sampling program that uses special buckets to capture air samples during industrial accidents or emissions or when residents smell chemical odors. The samples will be sent to Region 6's Houston lab to be tested and determine whether neighbors of local industrial plants were exposed to toxic chemicals. This effort empowers residents to execute their own air monitoring program and assess potential effects of emissions on their health and environment.

Region 8

North Park Hill Community Assessment. This community is in northeast Denver, immediately east of the VB/I-70 Superfund site. The residents of North Park Hill are primarily low-income with mixed ethnicity (largely African American with some Hispanic and white populations). The National Association of Black Environmentalists (NABE) received an Environmental Justice Through Pollution Prevention grant to identify possible sources of pollution in the neighborhood and identify mitigation measures. To achieve these goals, several residential yards were sampled for arsenic. From the 30 yards sampled, five (5) to seven (7) showed arsenic concentrations in excess of 400 parts per million. The source of the arsenic was not identified. These findings have raised a number of issues for Region 8. Are these findings associated with the contamination in the VB/I-70 Superfund site? What potential exposure do residents face? How extensive is this contamination? What are the probable sources (airborne smelter wastes, fill material from nearby smelters, pesticides/herbicides)? What should Region 8 do about this problem? Who is responsible for paying for any follow-up actions? Region 8 is coordinating follow-up activities with the State of

Assessment Methodologies, Assessment Guidance, and Community Assessments

Colorado and the City and County of Denver.

Region 10

Environmental Impact Statement Environmental Justice Reviews. OCREJ performed Environmental Impact Statements (EIS) reviews for three projects in Washington state: (1) Central Link Light Rail Transit Project in Seattle; (2) Service Road 167 Corridor in Tacoma; and (3) White River (Muckleshoot Indian Reservation) Amphitheater in Auburn. Each EIS was reviewed to determine if appropriate measures were taken to identify environmental justice communities, if environmental justice communities were subject to disproportionate impacts, and, if public participation was adequate and meaningful. Of particular importance is the involvement by OCREJ in the Central Link Light Rail Transit Project in Seattle. OCREJ has been the Regional point of contact for citizen concerns regarding the disproportionate environmental, health and quality of life impacts in low-income and minority neighborhoods. In addition, OCREJ is a member of the EIS development team for the Pogo Mine project in Alaska.

Assessing Impacts to Communities from Facilities Regulated by Title V. Region 10 OCREJ, worked with the Office of Air Quality (OAQ), the Office of Environmental Assessment (OEA), and the Oregon Operations Office (OOO), to identify potential environmental justice communities in Portland, Oregon, that may be affected by a facility regulated under Title V of the Clean Air Act. OCREJ and the OOO were contacted by residents of the area indicating that their concerns about air toxics, odor and particulate impacts on environmental justice communities were not adequately addressed by Oregon Department of Environmental Quality in their review of the facility's Title V permit. OCREJ has identified the communities in the area that meet national income and people of color population criteria, and will be working with OAQ and OEA to determine if those communities meeting national environmental justice criteria are disproportionately impacted by the facilities in the area.

EPA has long been involved in studies to identify contaminates in the environment and understand their impact on public health. The Agency also recognizes the importance of compliance assistance and enforcement in preventing and reducing unlawful emissions of contaminants into the environment.

Protecting the health of all communities represents a formidable challenge to the Agency. However, this responsibility does not rest solely with EPA, but is shared with other federal agencies (e.g. Department of Health and Human Services, Centers for Disease Control, Agency for Toxic Substances and Disease Registry, National Institute for Environmental Health Sciences.) In January 2000, the U.S. Surgeon General issued the publication, "Healthy People 2010: Understanding and Improving Health." The second goal presented in this report is to eliminate health disparities among different segments of the population. According to the report, there is clear evidence of health disparities among under-served minority groups. The report identifies environmental quality as a leading health indicator.

EPA is working with other agencies to secure disease prevention and health improvements in communities where health disparities exist that may result from, or be exacerbated by, disproportionate effects of environmental pollutants and certain racial, ethnic and socioeconomic factors. The Agency is seeking to accomplish this goal in a couple of ways: (1) targeting compliance assistance and enforcement of environmental laws; and (2) conducting studies which look at environmental health and exposure of minority and low-income communities. The following chapter discusses some of these compliance efforts and specific studies.

Targeting Studies

Region 4

Using Compliance Activity Tracking System (CATS) Data to Target Farm Worker Protection Efforts. CATS Worker Protection Standard data and farm worker Department of Agriculture data were compared and presented to state pesticide program leaders at their semiannual meeting. Comparisons/analyses such as these help states target specific geographic areas for increases in farm worker protection efforts. Additionally, regional project officers gain insight into a state's worker protection program which can be valuable during grant negotiations and assessing state needs.

Region 8

North Denver Environmental Initiative. In partnership with the state, counties, and cities, the Environmental Justice Program has initiated a three year effort to focus enforcement, compliance assistance and pollution prevention activities in the North Denver area. During public meetings sponsored by Region 8, as part of the Vasquez Boulevard/I-70 Superfund project, numerous non-Superfund environmental concerns were voiced by the North Denver environmental justice communities. Citizens described concerns about negative health effects that they believe to be the result of the saturation of industrial and other pollution generating uses in the area. The North Denver Environmental Initiative (NDEI) is Region 8's response to these concerns. The NDEI is envisioned to be a cooperative partnership utilizing federal, state, county, and local government authorities to proactively address community concerns regarding potentially harmful environmental consequences of the industrial and transportation developments in their neighborhoods. Region 8 seeks to work with the Colorado Department of Public Health and Environment, the City and County of Denver, Tri-County Health Department, and Commerce City on this initiative. NDEI goals are to: (1) get NDEI industrial facilities into compliance through increased enforcement and compliance assistance; (2) get NDEI industrial facilities above and beyond compliance through pollution prevention; and (3) effectively work with all NDEI partners. The NDEI area includes the Vasquez Boulevard/I-70 Superfund site and almost 500 industrial sources within and surrounding the Vasquez Boulevard/I-70 site. The environmental justice communities involved include Swansea/Elyria, Globeville, Cole and Clayton. Region 8 has conducted 35 inspections as part of the NDEI.

Region 9

Lead Inspections. The Department of Housing and Urban Development (HUD) and the Department of Justice (DOJ) selected three large, metropolitan areas of the country which have large inner-city areas where lead poisoning from lead-based painting was expected to be prevalent. Los Angeles was selected in Region 9. Based on information provided by the state and county, Region 9 joined HUD and DOJ to target and conduct inspections of apartment complexes where children with elevated blood lead levels were living. The three agencies conducted 44 inspections in large, older apartment complexes. The potential cases were divided between HUD and EPA. Region 9 has since issued three notices of noncompliance or violations of the lead disclosure rule.

Environmental Justice Enforcement Strategy. Region 9 completed an environmental justice enforcement strategy as the first step in integrating environmental justice into its enforcement activities. Targeting inspections and utilizing Supplemental Environmental Projects have been highlighted as potential means to apply an environmental justice enforcement strategy. For FY 2000, the Region focused on environmental justice communities in the Los Angeles area. Three communities have been identified (South Central Los Angeles, East Los Angeles, Southeast Los

Angeles.) Each media division has developed an environmental justice enforcement work plan for environmental justice communities in Los Angeles. The environmental justice enforcement work plans include the participation of state, county and local agencies in the implementation of enforcement related efforts.

Environmental Health Assessments/Studies

Centers of Excellence in Children's Environmental Health Research. The Office of Pesticides Programs and the Department of Health and Human Services have funded eight "Centers of Excellence in Children's Environmental Health Research." Two of these centers involve farm worker's children. The University of California at Berkeley will evaluate pesticide exposures and growth/developmental status in the Salinas area, and the University of Washington will study the health of children living in the farm worker community in the Yakima Valley.

Neural Tube Defect (NTD) Assessment Along The US-Mexican Border. The project purpose is to document and reduce the prevalence of NTD on both sides of the border and elsewhere in Mexico through case-control and epidemiological studies, fortification of flour and grain food products, training of health professionals in the border region, and education of at-risk populations.

Region 1

Lawrence Risk-Based Air Screening. To identify the tools and actions that can best reduce the risks to human health posed by air pollution in the city of Lawrence, MA, EPA seeks to identify the most significant contributors to human health risk from air pollution. EPA has funded a project through an Environmental Monitoring for Public Access and Community Tracking (EMPACT) grant that is being used to support community outreach and participation in Lawrence, MA.

This project uses a combination of existing data on ambient air quality, modeling of Hazardous Air Pollutants (HAPs), and other information to identify the chemicals (HAPs) and sources of air pollution that are contributing the most to human health risk and decreased quality of life in the city of Lawrence, MA. The project essentially seeks to assess the impact of air pollution from stationary and mobile sources on human health, and to prioritize the contributors to that risk in order to determine what chemicals or sources make ideal targets for community and government response. The project is conducted in collaboration with key community partners, and incorporates feedback and guidance from these stakeholders. The prioritization of pollution sources is being used to develop an "action agenda" to identify community-based measures that can be taken to reduce the impact of the most hazardous chemicals or sources.

The first major task is the development of a list of chemicals, facilities, and other sources of air pollution ranked according to impacts on human health and other criteria identified by stakeholders. The second major task is the communication of these results to the larger community.

The third task is the identification of action items necessary to reduce the most significant hazards, and the development of a community-based action agenda.

To accomplish this project Region 1 has partnered with EPA Headquarters, OPPTS (technical assistance), Lawrence Environmental Justice Committee, Community Health Network Area 11 - Environmental Committee, Massachusetts Department of Environmental Protection, and the Massachusetts Department of Public Health. Other stakeholders involved in this project are the Lawrence community residents, business and industry, the City of Lawrence, MA, academic institutions (including Merrimack College and Northern Essex Community College).

Region 3

South/Southwest Philadelphia Environmental Health Characterization. Region 3, in partnership with Johns Hopkins University, the Agency for Toxic Substances and Disease Registry (ATSDR), the Commonwealth of Pennsylvania, the City of Philadelphia, academics who serve on a science advisory board, and local communities in the City of Philadelphia are working to develop strategies to measure the level of key pollutants in the environment. The citizens of the study area continue to request that EPA address their environmental concerns, specifically the air emissions from the numerous auto repair body shops located in South Philadelphia. Di-isocyanates, an air emission from auto repair shops, is one of the main pollutants of concern to the South Philadelphia residents. Johns Hopkins University and ATSDR had recommended that further study be conducted on the potential impact of di-isocyanates on the community. The partners associated with this effort continue to work together to address concerns, and serve on the City of Philadelphia's Ad Hoc Air Advisory Committee, as a result of the collaborative effort.

Chester, Pennsylvania Environmental Risk Study. Located approximately 15 miles south of Philadelphia, the City of Chester's minority population is approximately 70 percent. Chester has the highest concentration of industrial facilities in Pennsylvania, including two oil refineries, a large medical waste facility, the Delaware County wastewater treatment plant, a large trash to steam facility, and other waste facilities. Residents of Chester have long been concerned about the health effects of living and working among toxic substances. Chester has the highest infant mortality rate coupled with the lowest birth rate in the state. Since the early 1990s, Region 3 has been working, in cooperation with the Commonwealth of Pennsylvania, to address the environmental risks, health, and regulatory issues in Chester.

The Chester Implementation Workgroup, made up of representatives from the stakeholder groups in Chester, was created to address issues identified by the community relating to health, quality of life and land use. Representatives from 30 different federal, state, county or city agencies/departments, and citizens groups participated in this workgroup. The workgroup distilled the fifty (50) identified problem areas into five (5) key areas that predominantly impact the children and youth of the City of Chester. The first area to be addressed was the reduction of children's blood

lead levels. Region 3, the Department of Housing and Urban Development, Center for Disease Control (CDC), Health and Human Services, and the Agency for Toxic Substances and Disease Registry participated in the planning and strategy sessions, along with the Health Department of the City of Chester and the Commonwealth of Pennsylvania. The City of Chester obtained additional funding for its Childhood Lead Poisoning Program from the CDC and Delaware County. Region 3's Office of Enforcement, Compliance and Environmental Justice has provided the partners with insights and perspectives on risk assessment, community and stakeholder involvement, public participation, and various aspects of environmental justice including; historical perspectives, trends, models, and strategy development. A Supplemental Environmental Project (SEP), resulting from an EPA enforcement action taken in Chester, is on-going. The SEP is administrated by Chester Residents Concerned for Quality Living. The group, as part of the SEP, is attempting to complete an extensive blood lead survey of children in Chester. Also, as part of the SEP, the group is also involved in the cleaning of homes in Chester to remove lead contamination.

Region 8

North Casper Community Alliance. A community-based organization in Casper approached the State of Wyoming and Region 8 for assistance in addressing health issues that residents believe to be the result of air, water, and soil contamination in their neighborhood. Studies conducted in the North Casper neighborhood detected groundwater plumes containing PCE and other compounds, and soil and indoor air contamination. EPA and the State of Wyoming requested involvement from the Agency for Toxic Substances and Disease Registry (ATSDR) to conduct health-based investigations. ATSDR and EPA are discussing the formation of a "community alliance" to address the health concerns expressed by the residents. Region 8, ATSDR personnel, state and city representatives, and community members have committed to work together to address the range of concerns raised.

Region 9

Tucson, AZ. Residents of the south side of Tucson, AZ were exposed to unsafe levels of an industrial solvent, trichloroethylene (TCE), which was discovered in their drinking water supply by EPA and the City of Tucson in 1981. EPA listed a large section of Tucson's south side as a Federal Superfund Site in 1982 and since then, work to investigate and cleanup the TCE contamination has been on-going. The affected community is 50 to 75% Latino (according to the 1990 census) and low-to-medium income. Community concern has always focused on potential adverse health effects caused by historic TCE exposure and obtaining access to health care for potential TCE-related illnesses.

Other community concerns include access to health and technical information about TCE and EPA's TCE cleanup actions, eliminating any potential on-going exposure to TCE, addressing

negative economic impacts caused by the contamination, and taking legal action against the companies responsible for the TCE contamination. Several grassroots community groups have formed to provide a voice to these community concerns and several of these groups established ties with the Southwest Network for Economic and Environmental Justice (SNEEJ).

On November 4, 1999, SNEEJ met with Region 9 management to express their dissatisfaction with the level of community involvement in the negotiation of the Airport Property Consent Decree which was lodged on June 17, 1999. They were concerned that: (1) the community was not given adequate notice that EPA was entering into negotiations with the potentially responsible parties (PRPs); (2) EPA did not keep the community apprised of the Consent Decree negotiations while they were occurring; and (3) a representative of the community did not participate in the Consent Decree negotiations. SNEEJ also raised concerns about the existing Unified Community Advisory Board (UCAB) bylaws not meeting environmental justice principles.

As requested by SNEEJ, EPA will continue to update the Community Involvement Plan for the site. As part of this effort, EPA conducted community interviews to assess the Tucson community needs and how the Agency can address them. EPA is continuing to explore available resources to provide technical support to the community. The local community continues to be frustrated by the lack of federal action regarding access to health care.

Ritualistic Uses of Mercury. Certain ritualistic, cultural and ethnic uses of elemental mercury may pose a significant health risk. EPA is leading the multi-agency Ritualistic Use of Mercury Task Force to address concerns of potential elemental mercury exposure in some Latin American and Caribbean communities in the United States. The Task Force includes representatives from EPA, the Agency for Toxic Substances and Disease Registry (ATSDR), State and local health departments, State environmental agencies and national Hispanic and Caribbean organizations.

The Task Force will: (1) Gather and share information about efforts to evaluate the extent of the problem; (2) Design a community-based strategic plan for education and outreach to reduce use of, and exposure to, mercury; (3) Develop a research agenda to better define the extent of distribution and problems resulting from ritualistic uses of mercury; and (4) Draft a proposed Public Health and Environmental Management Protocol for Dealing with Ritualistic Uses of Mercury, if needed. This protocol would be developed as information becomes available about the extent of the problem and populations at risk. The protocol would cover outreach to affected populations, health education activities and identify tiers of action to follow if a response is needed.

U.S.-Mexico Border Environmental Health Surveillance Demonstrations: Air Pollution and Childhood Asthma. As part of the effort to improve the quality of health related to environmental issues along the border, EPA in partnership with other agencies, is supporting the binational data gathering of asthma prevalence in elementary school children. Once adequate data bases are established and analyzed, this information will be linked to air pollution levels/environmental conditions at the time of increases in asthma reporting. Having baseline data on childhood asthma

related illnesses and the linkage with air pollution/environmental conditions from the binational U.S.-Mexico border states will assist state and federal agencies with future planning of health services and environmental health surveillance activities.

Exposure Studies

Pesticide Exposure. The Office of Pesticides Programs (OPP) is collecting data on pesticides exposures by co-funding and providing consultation to the National Institute for Occupational Safety and Health (NIOSH) for pesticide case reporting projects (surveillance systems) in five (5) states: California, New York, Texas, Oregon and Florida. The surveillance systems, located in the state health departments, include the collection of reports on human incidents of pesticide intoxication, review of trends in disease over time and the response to outbreaks of disease. There is emphasis placed on outreach and training to involved groups within the community (industry/farmers, workers, community residents, health care providers and local government). Whenever possible, information is obtained on take-home exposures to children as well as an evaluation of child or adolescent farm work. It is anticipated that preliminary data on the first year of pesticide case reports for these five states will be available in early 2001.

Characterizing the Unique Aspects of Human Exposure in Low SES Communities in the Research Triangle Park, NC Area. This partnership is intended to improve the scientific community's ability to conduct human exposure research in low socioeconomic status (SES) communities. This project will contribute to the advancement of knowledge for conducting human exposure research in low SES communities and communicating the results of such studies to the affected communities. The results of this project will also benefit the local community where the studies are conducted by improving outreach into the community. The project will focus on four issues: 1) Identifying environmental justice issues in the community; 2) Linking community members with researchers and health care providers through a series of research, education, and outreach strategies designed to assess the environmental and health conditions of low SES communities and to work toward improving these conditions; 3) Developing improved techniques that will increase participant recruitment and retention rates for human exposure studies in low SES communities; and 4) Developing improved techniques for communicating the results of studies in low SES communities to the targeted populations.

Region 3

Baltimore Urban Environmental Initiative (BUEI). The BUEI is a major project being conducted in Baltimore in cooperation with Maryland Department of the Environment (MDE), the Baltimore City Health Department, and the Baltimore City Planning Department. This project is a cooperative effort being conducted to identify and rank areas of disproportionate risk in the City of Baltimore

for purposes of implementing risk reduction, pollution prevention, public awareness and other activities to effectively eliminate, or at least minimize these risks. A two track approach was taken in order to achieve these goals. An action oriented Short-Term Track, and a Long-Term Track which incorporates risk screening and the development of focus groups to achieve project goals. In the Short-Term Track, grants awarded to the City of Baltimore and MDE have led to the development of a number of projects designed to address environmental concerns in the areas of lead, hazardous materials incidents, indoor air quality, fish consumption/toxins in the Baltimore Harbor, ground-level ozone pollution, and air toxins.

Region 6

Monitoring Activities for Ponca Tribe of Indians of Oklahoma: Region 6 is providing monitoring support for the Ponca Tribe of Indians (Ponca) of Oklahoma by providing grant funding for the Oklahoma Tribal consortium, Inter-Tribal Environmental Council of Oklahoma (ITEC) to place and run air monitors on Tribal lands. The Ponca lands are between the Conoco, Inc., refinery and the Continental Carbon Company, a carbon black plant. The monitors are measuring five criteria pollutants, PM10, and PM2.5, and have been in place since April 1999. Tribal members have previously complained of respiratory problems and grey/black particles that cover their cars and homes, to Region 6. Once ITEC accumulates sufficient monitoring data, the region will make its determination as to the most appropriate action to pursue.

Region 8

Vasquez Boulevard/I-70. The Vasquez Boulevard/I-70 Superfund site contains high levels of arsenic and lead in residential soils. Region 8 and the Agency for Toxic Substances and Disease Registry (ATSDR), in conjunction with the affected North Denver communities, are looking at the exact nature and extent of the contamination and are assessing the extent of community exposure. The site comprises more than four thousand houses surrounded by significant heavy and light industry and bisected by a major Interstate highway. The neighborhoods are acutely aware of the proximity of industry and its impacts on their way of life and their health.

The community has come together to work on the removal of contaminated soils with the EPA, ATSDR, the State of Colorado and the City and County of Denver. As a part of this effort, the community has brought their concern over commonly-observed incidences of asthma, thyroid disorders, cancer and skin irritations to the various agencies. ATSDR is performing a Public Health Assessment as a part of its obligations under Superfund. Additional health and epidemiological studies have been discussed by all parties as possible follow-ups to Superfund remediation.

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