

**COMMUNITY CAPACITY BUILDING FOR WASTE MANAGEMENT,  
REVITALIZATION AND SUSTAINABLE REDEVELOPMENT**

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**ABSTRACT**

Capacity building programs help poor and disadvantaged communities to improve their ability to participate in environmental decision-making processes. These programs encourage citizen involvement, and provide the tools that enable them to do so. Capacity building enables communities that would otherwise be excluded to participate in the process, leading to better, and more just, decisions.

The Department of Energy (DOE) continues to be committed to promoting environmental justice and involving its stakeholders more directly in the planning and decision-making process for waste management and environmental cleanup. Through its environmental justice projects, DOE provides communities with the capacity to effectively contribute to a complex technical decision-making process by furnishing access to computers, the Internet, training and technical assistance. DOE's Dr. Samuel P. Massie Chairs of Excellence Program (Massie Chairs) functions as technical advisor to many of these community projects. The Massie Chairs consist of nationally and internationally recognized engineers and scientists from nine Historically Black Colleges and Universities and one Hispanic Serving Institution.

DOE also supports the concept that the cleanup and revitalization process should be completed in a manner that minimizes the potential for waste generation at the reclaimed site. Once a site is cleaned, the local community has the responsibility and authority to determine how the property will be used in the future. Permitted activities that generate little or no waste include open spaces, designated green spaces, environmentally protected areas, park spaces and other non-manufacturing uses. However, in some instances, the best interest of the community dictates that other uses such as light industry, or in some cases, manufacturing activities occur on the reclaimed property. In these instances, the local community has the responsibility to insure that the light industry or manufacturing activities be conducted in a manner that minimizes waste generation, or that waste be managed in a manner that prevents contamination to the property.

Frequently, small towns and rural communities with contaminated sites within their borders lack the capacity and resources to restore the sites to useable conditions. It is often the case that the parties responsible for the property contamination are no longer in business, can't be located, or lack the financial resources to conduct an effective cleanup program. In these instances, the community must seek aid and assistance from outside sources, most notably the state and federal government.

If the community is fortunate enough to find that the party responsible for the cleanup is financially solvent with ample means, or is a unit of state or federal government, the cleanup problem may be solved. In these situations, the challenge for the community is to understand the level of contamination and potential remedies. DOE works with communities impacted by DOE cleanup activities and other communities to seek and implement solutions to environmental contamination that previously prohibited economic development and sustainable growth.

## **INTRODUCTION**

The Department of Energy (DOE) is conducting several capacity building projects around the country. Some of these projects help host communities near DOE facilities participate in environmental management decisions that impact their neighborhoods. Other projects help a professional association of African-American mayors increase their individual and collective abilities to participate in energy and environmental decision-making at all levels. Still other projects help small towns and rural communities understand environmental issues and participate in federal environmental management programs. Regardless of location, each project helps the target population recognize the issues, understand the range of remedies, and select the solution that is in their best interest.

A key component of each project is computer technology. Each project employs technology to facilitate planning, resource development, communication and project management. In some cases, the target population requires assistance obtaining computers and access to the Internet. Others require training and technical assistance. Each project includes online technical assistance to help community groups, small towns and rural communities address energy, environmental and economic development challenges. The guiding principle of each project is to conduct a series of activities that builds community capacity for environmental cleanup, waste management and sustainable development in a manner that permits the local host community to grow and develop with little or no additional DOE assistance.

Capacity building programs help poor and disadvantaged communities to improve their ability to participate in the environmental decision-making processes. They encourage citizen involvement, and provide the tools that enable them to do so. Capacity building enables communities that would otherwise be excluded to participate in the process, leading to better, and more just, decisions.

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## **ENVIRONMENTAL JUSTICE AND COMMUNITY CAPACITY BUILDING**

### **Environmental Justice**

The Environmental Protection Agency (EPA) defines environmental justice as "fair treatment and meaningful involvement of all people, regardless of race, ethnicity, culture, income, or education level with respect to development, implementation, and enforcement of environmental laws, regulations and policies." Fair treatment means that racial, ethnic, or socioeconomic groups should not bear a disproportionate share of negative environmental consequences resulting from industrial, municipal, and commercial operations, or from the execution of federal, state, local laws, regulations and policies. EPA's definition of environmental justice further states that no population should suffer a disproportionate share of environmental burdens.

Environmental justice works best when vulnerable communities are able to care for themselves and can determine their own environmental fate. Environmental justice works on the concept that a community that is environmentally literate and is active in environmental decision-making

is the best source for waste management and environmental protection. In those cases where the community lacks environmental knowledge or access to trusted technical assistance, it is incumbent on their government to provide the resources to guarantee the community environmental protection.

### **Community Capacity Building**

Community capacity building is the process that gives local community groups the necessary tools needed for meaningful participation in agency decision-making. Citizens who come into a decision-making process with little or no information about the process or the subject matter under consideration will find it all but impossible to make a meaningful contribution to the process. Despite the emphasis that Federal agencies have placed on public participation, numerous low-income and minority groups remain out of the process due to an inability to navigate the process or understand the subject matter under consideration.

Capacity building programs help poor and disadvantaged communities to improve their ability to participate in environmental decision-making processes. They encourage citizen involvement, and provide the tools that enable them to do so. Capacity building enables communities that would otherwise be excluded to participate in the process, leading to better, and more just, decisions.

For the past decade, DOE has conducted environmental justice and community capacity building programs. Some of the programs provide environmental justice training to DOE employees and community groups. Other programs provide computers, environmental training, technical assistance and other resources to community groups and municipal jurisdictions. The common theme in all of the capacity programs is a desire to help the target population gain the necessary tools to make meaningful contributions to environmental decisions and to better protect themselves from environmental contamination.

## **COMMUNITY GROUPS**

### **Augusta, Georgia**

Augusta, Georgia is near DOE's Savannah River Site (SRS), which is located in Aiken, South Carolina. Several years ago, DOE and EPA collaborated to build community capacity for environmental decision-making in Augusta by creating a community technology center. Howard University Urban Environment Institute provided technical assistance. Paine College provided Internet access to the center. Once the center was in operation, Howard University, EPA and DOE provided training sessions that included basic computer operations, GIS, risk assessment, risk management, and other subject matters such as grants research and proposal writing.

In one of the environmental training sessions at the Augusta community technology center, the community decided that it wanted to apply for an Environmental Protection Agency Brownfields Pilot grant. Community residents took the lead and drafted the basic Brownfields application and posted it on their website for public review and comment. Through an agreement with the mayor, the City submitted the application to EPA for consideration. EPA selected the proposal

and provided a \$200,000 assessment grant to the City. Charles Utley, director of the community technology center is the chair of the Augusta Brownfields Commission and leads the effort to revitalize Augusta.

Since 1999, the Augusta Brownfields Commission has registered many successes. First, it conducted an assessment of a ten acre contaminated site. Second, it secured an \$8,000,000 state grant to clean the site. Third, it has cleaned the site of all environmental contaminant. And fourth, it has secured another EPA grant to assess additional sites and develop a revitalization plan for the initial site cleaned through the Brownfields strategy. The commission is currently seeking a new use or uses for the ten-acre site that that will produce revenues for the community without generating waste. All of the Augusta Brownfields revitalization results are direct products of the community technology center and the DOE community capacity building effort.

### **Savannah, Georgia**

Savannah, Georgia is south of DOE's Savannah River Site (SRS). The Savannah community has been active in SRS activities for several years and presented a different set of needs from the Augusta community. Through a series of meetings and discussions with the mayor and community groups, the community decided to create a community technology center to tackle workforce development issues.

As a result of this decision, the City formed a collaboration that includes DOE, the Massie Chairs of Excellence, various community groups and a local institution of higher learning to create a technology center with a specific focus on workforce development. DOE provided excess and surplus computers for the center. The Massie Chair at Tennessee State University provided additional computers and installed the equipment in the center. The community groups helped the center to determine the training programs that will serve the community for workforce development as well as environmental management programs. The center opened in September 2003 and serves the entire Savannah community.

### **Oak Ridge, Tennessee**

Scarboro is a small environmental justice community near DOE's Oak Ridge Operations site in Oak Ridge, Tennessee. For years this small community has complained about environmental and racial discrimination from all sources.

As a means to improve relationships between the City of Oak Ridge, the Scarboro community, and DOE, DOE held a series of discussions in the Scarboro community. The original participants in these discussions included DOE, DOE's Oak Ridge Operations (ORO), EPA, Tennessee State University's Massie Chair and the City of Oak Ridge. The discussions produced the following resources.

- Two trailers from ORO. (ORO covered the cost of disassembly, transportation, re-assembly, set-up and utility installation.)
- Excess computers from DOE.

- Technical assistance from DOE and Tennessee State University's Massie Chair.
- Training Classes from Tennessee State University.
- Upgraded equipment.
- Internet Access

The Scarboro Community Environmental Justice Council, Inc. (SCEJC) supports and manages the Scarboro Community Technical Center in conjunction with Mt. Zion Baptist Church. SCEJC is a non-profit corporation. The center plans to offer additional classes for community residents. DOE and the Massie Chairs will conduct additional training for Scarboro community residents. The additional classes sought by the community include basic computer instructions, Internet use, HTML development and grant writing. All of the training will support DOE's efforts to improve relationships with this segment of a host community that has felt neglected and abused for decades.

DOE has an interest in maintaining an excellent relationship with all segments of its host communities. The Scarboro technology center affords this community an opportunity to communicate with DOE officials and others on a regular basis. It also allows the community to receive assistance with technical matters from Tennessee State University and other Massie Chair institutions. The Massie Chairs will review technical and complex documents and provide explanations to a lay audience in lay terms. This assistance allows community residents to provide meaningful recommendations to Oak Ridge Operations waste management decisions.

### **THE NATIONAL CONFERENCE OF BLACK MAYORS**

Since July 1999, the National Conference of Black Mayors (NCBM) and the Department of Energy have worked collaboratively to build and enhance NCBM members' capacity for energy and environmental planning, for monitoring and responding to energy and environmental issues, and for participating in environmental cleanup activities. During the first two phase of this partnership, the parties sought to utilize various training methods and formal relationships with historically black colleges and universities as sources of technical assistance and guidance to mayors. In Phase II, the parties sought to strengthen these efforts and emphasized increased collaboration between municipal governments and the Massie Chairs of Excellence Program to address local energy and environmental concerns. Phase III will continue the successful efforts of the first two phases, which will concentrate efforts in the states that are directly impacted by DOE's Savannah River Site and Oak Ridge Operations, and will work to strengthen local relationships between Massie Chair institutions and local municipalities served by those institutions.

Specifically, Phase III concentrates efforts in Georgia, South Carolina and Tennessee to establish formal relationships between the Massie Chairs and the locally elected officials to help build capacity to provide input into the planning and decision-making processes of DOE's Environmental Management Program. It will help build capacity for local elected officials and low-income and minority communities to contribute meaningfully to the cleanup decisions

associated with environmental contamination resulting from the nuclear weapons complex. The Massie Chairs will work with the mayors, other elected officials and local citizens to collect and analyze soil and water samples to get a clear understanding of the contaminants that may be present in their communities. Several of the Massie Chair institutions have state certified labs that analyze soil and water samples on a regular basis. In addition, the relationships with the Massie Chairs will examine infrastructure problems in various jurisdictions and pursue economic development opportunities in environmental clean-up and revitalization activities.

Another Phase III element of the NCBM/DOE collaboration helps NCBM members prepare proposals and manage projects. In October 2003, the NCBM/DOE collaboration agreed to help six small jurisdictions develop and implement their Brownfields strategies. The six jurisdictions are:

- Bessemer, Alabama
- Hobson City, Alabama
- Prairie View, Texas
- Hattiesburg, Mississippi
- Glendora, Mississippi
- Navassa, North Carolina

The initial step in the Brownfields strategies is to help the jurisdictions prepare and submit a Brownfields proposal to EPA. In order to prepare the proposals, the NCBM/DOE team conducted the following activities:

- Visited all six jurisdictions to view potential Brownfields sites and discuss a potential Brownfields strategy geared towards the specific requirements of that jurisdiction;
- Discussed Brownfields strategies with the mayor of all six jurisdictions;
- Reviewed EPA's Brownfields Proposal guidelines and prepared a summary and proposal outline for the proposal writers;
- Assigned a proposal writing team that included a DOE Massie Chair for each jurisdiction;
- Conducted conference calls to discuss proposal writing;
- Coordinated the proposal writing with the Massie Chairs; and
- Submitted five proposals to EPA prior to the published deadline for submitting proposals.

The Massie Chairs will serve as technical advisors to each successful applicant and provide other management support to insure that each Brownfields strategy is conducted in a sound and successful manner. As technical advisors, the Massie Chairs will review assessments, examine proposed cleanup options and provide professional advice in all scientific and engineering matters.

## **SMALL TOWNS AND RURAL COMMUNITIES**

DOE is engaged in a series of projects that have been designed to build capacity in small towns, rural and tribal communities. DOE's environmental justice program has recognized that federal agencies are rapidly moving towards an electronic government. As a result of this movement, the digital gap between federal agencies and small towns, rural and tribal communities continues to grow. To reduce and eliminate the gap, DOE has collaborated with other federal agencies to provide resources and tools to small towns, rural and tribal communities. Some of these collaborative projects are described below.

### **White House Conference on Small Towns, Rural and Tribal Communities**

The mission of the White House Conference on Small Towns, Rural and Tribal Communities is to assist America's under-served small towns, rural and tribal communities with the tools and resources that will enable them to become competitive through the use of technology, education, and federal support.

The main objective of the conference seeks to provide new and expanded opportunities that will equip small towns, rural and tribal communities with the necessary skills and resources to:

- increase the stock of affordable housing,
- develop and expand economies and stimulate new jobs,
- create and develop technologically-skilled workers,
- promote community redevelopment and capacity building,
- comply with federal, state, and local regulations, and
- solicit and receive government and financial assistance.

DOE and the other conference collaborators will conduct the conference in the following three phases:

**Phase One** -- A one-day national conference at the White House. This conference will convene representatives from across America to discuss challenges to managing small towns and rural communities in light of the federal agencies' growing reliance on e-government. White House Officials, Cabinet members and senior level government officials will participate in sessions to discuss current and planned initiatives focused on small towns, rural



and tribal communities. The conference will highlight model programs from each participating agency and new initiatives designed for small towns, rural and tribal communities. The intended outcome from Phase One is to identify funding and other resources to help address the challenges facing small towns, rural and tribal communities.

**Phase Two** – A series of regional conferences similar in format to the White House conference in strategically located small towns across America.

**Phase Three** – Follow-up technical assistance activities.

### **Supplemental Environmental Projects**

Supplemental Environmental Projects (SEPs) constitute a means for providing funds to conduct environmental justice and environmental revitalization projects in small towns and rural communities. These voluntary commitments of funds can support projects designed to promote public health and the environment to a greater degree than fines and other punitive sanctions. The specific projects can be the product of negotiations between the government and the defendant or respondent, and may include other entities such as community groups or local elected officials. In either case, the agreed upon SEP should provide a public benefit to offset, to some degree, the impact of the environmental insult.

DOE and its collaborative partners examine SEP issues to determine how this resource can help small towns, rural and tribal communities gain additional tools and resources to participate in environmental decisions.

Many small town mayors serve in a part-time position and frequently a clerk manages the day-to-day activities of the town. It is often the case that smaller jurisdictions lack the capacity and ability to compete for funding against the larger municipalities. It is also frequently the case that funds allocated to the state, parish or county remain at that level and never trickle down to the smaller municipalities. This has happened in SEP cases even when the environmental insult occurred in the small town. For these reasons, DOE has collaborated with EPA and other entities to help small towns and rural communities understand the SEP process and to participate in SEP decisions.

Environmental Justice requires that entities that are impacted by environmental decisions have meaningful and informed involvement in the process that leads to the decision. SEPs, by their nature, have an impact on the public health and safety of the community in which they are implemented. It logically follows that local elected officials and the public should have an active participation in SEP designs. Current regulations require a direct connection between a SEP and the environmental violation. Frequently this requirement and other requirements present real challenges when developing SEPs that meet the interests of all parties and remain within the confines of law and policies.

One consideration to overcome these challenges is to establish a Small Towns (25,000 or less population) and Rural Area Environmental Revitalization Fund that can be financed with proceeds from all civil and criminal enforcement actions. For every civil and criminal

enforcement action that includes a SEP, a portion of the fine will go into the Small Town and Rural Area Environmental Revitalization Fund (Fund) and would be used exclusively for small town revitalization purposes. The Fund could be managed by a small committee with representatives from the Environmental Protection Agency, the Department of Justice, small towns, small communities and the private sector. The Fund could issue requests for proposals annually contingent on the amount of dollars on hand. The small management committee could approve the guidelines consistent with existing law, regulations and policy and could name a project selection panel to make recommendations for the awards and project decisions. Such a fund could increase local municipal and community participation in designing SEPs and determining how the funds are allocated.

### **Small Town Needs**

Many small municipalities lack adequate resources to take advantage of the wealth of opportunities now available through the Internet. They lack basic technology such as computers and access to the Internet. The cost of Internet services prohibits small, low wealth municipalities from connectivity, particularly high-speed connections. Taken together, the small, low wealth municipalities described above operate at a severe disadvantage.

Since July 1999, DOE has worked with others to build and enhance small town capacity for energy and environmental planning, for monitoring and responding to energy and environmental issues, and for participating in environmental cleanup activities and/ decision-making processes.

DOE is working with others to design and operate a web portal that will provide a variety of services and information to small towns, rural and tribal communities, limited resource farmers, community groups and others. In addition to the information available on the site, there will be periodic funding alerts sent through e-mail to all municipalities, limited resource farmers and community groups. The alerts will include funding opportunities from federal agencies, state agencies and foundations.

### **Windows on The World Technology Center**

DOE, the United States Department of Agriculture (USDA), the Environmental Protection Agency (EPA), the General Services Administration (GSA) have collaborated with the small town of Roper, North Carolina and others to create Windows on the World Technology Center. Federal support of communities such as Roper supports the President's Management Agenda. The federal agencies donated 40 excess computers, office furniture and other services to the center.

By providing excess agency computers and other services to provide community technology centers, federal agencies offer citizens the opportunity to explore environmental cleanup information, obtain technical assistance using internet-based sources and to communicate with federal decision-makers.

## **DOE'S CAPACITY BUILDING EFFORTS PRODUCE RESULTS**

There are several benefits to be gained from helping stakeholders improve their ability for greater participation in decision-making processes. Some of these are:

- Meaningful involvement can lead to better and more just decision-making as well as cost-efficient decisions.
- Stakeholders gain a working knowledge of the subject under consideration, as well as the procedures driving decision-making processes.
- Communities and other stakeholders are given the tools they need to participate more effectively in decision-making processes and are better equipped to provide for their own health and safety.
- Many communities would otherwise be unable to participate if not for these programs.
- Stakeholders develop better relationships that facilitate problem solving.

DOE can see numerous results from its capacity building efforts. Some of these results are:

- Augusta, Georgia residents have gained resources to clean a contaminated site and start the process of relocating residents.
- Augusta residents have increased their participation in DOE Savannah River Site (SRS) decision-making activities with an improved understanding of the SRS decision-making process.
- Augusta residents who are leading the Augusta Brownfields effort are now providing technical assistance to others in Augusta and the surrounding area who are faced with environmental contamination issues.
- Augusta Brownfields Commission has received a second Brownfields grant to assess additional contaminated sites and to develop redevelopment strategies.
- Scarboro community residents in Oak Ridge, Tennessee have a community technology center and are now communicating with officials at the DOE Oak Ridge Operation Office on a regular basis.
- Scarboro community residents have access to technical assistance to help them understand environmental, engineering and technology issues.
- Savannah, Georgia residents have a community technology center to address workforce development and environmental contamination issues.

- The small town of Roper, North Carolina has a technology center and the ability to provide technical assistance to small towns in northeast North Carolina.
- Many National Conference of Black Mayors' member jurisdictions now have computers, access to the Internet and access to technical assistance through the Massie Chairs of Excellence Program.

## **CONCLUSION**

DOE takes the position that citizens who are active in environmental decision-making, and have a working knowledge of both the procedure and substance of an issue, can better protect themselves and help produce decisions that reduce conflict and save limited resources. Helping communities reach their environmental, economic development and revitalization goals is the objective of this community capacity building project. Environmental Justice means that all people who are impacted by a decision have an opportunity to meaningfully participate in the process that leads to the decision. When this is accomplished Federal agencies will make more just and cost-effective decisions.