

MDB, Inc.

Doing Well by Doing Good

**U.S. DEPARTMENT
OF ENERGY PUBLIC
ENGAGEMENT,
EDUCATION,
AND OUTREACH
ACCOMPLISHMENTS
REPORT:**

Making a Visible Difference in
Environmentally Overburdened,
Underserved, and Economically
Distressed Communities
(1994-2018)

JANUARY 2020



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■ INTRODUCTION

All across the United States, disadvantaged communities living in proximity to environmental hazards have suffered from adverse health impacts and social and economic issues. Overburdened communities are those communities or populations, including minority, low-income, Tribal, and indigenous, in the United States that potentially experience disproportionate environmental harms and risks as a result of vulnerability to environmental hazards. Underserved communities are communities or populations that are provided with inadequate services or facilities for all aspects of quality of life, including lack of healthcare facilities or services, education opportunities, and affordable housing. Economically distressed communities are impoverished communities or areas that have a high unemployment rate, high mortgage foreclosure rates, and declining home prices. In an attempt to address environmental justice (EJ) concerns, President William Clinton signed Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* on February 11, 1994, which required that the Federal government adequately address the health and environmental issues faced by communities disproportionately impacted by environmental hazards.

In response to EO 12898, the U.S. Department of Energy (DOE), along with other federal government departments and agencies, has focused on working closely with DOE stakeholders and EJ communities to address EJ concerns. DOE has established various programs, policies, activities, and partnerships that actively engage communities that have been disproportionately impacted by environmental hazards.

The goal of this report is to document how DOE policies, programs, and activities have made a visible difference in environmentally overburdened, underserved, and economically distressed communities.

BACKGROUND

Environmental justice is the “fair treatment and meaningful involvement 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.”

Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.

Meaningful involvement means that:

- People have an opportunity to participate in decisions about activities that may affect their environment and/or health;
- The public’s contribution can influence the regulatory agency’s decision;
- Their concerns will be considered in the decision-making process; and
- The decision makers seek out and facilitate the involvement of those potentially affected.

Environmental Justice History

The EJ movement gained national attention in 1982, when a small, predominantly African-American community in Warren County, North Carolina was designated by the state to host a hazardous waste landfill. This landfill would accept PCB-contaminated soil resulting from illegal dumping of toxic waste along roadways. In response to this decision, a massive protest ensued, leading to hundreds of arrests. While the protest failed to prevent the siting of the landfill, it did bring the issue of EJ into the national spotlight.

Following the protest, the General Accounting Office (GAO) conducted research in 1983 on hazardous waste siting decisions and found that three of four hazardous waste landfill sites in eight southeastern states were located in primarily poor African-American and Latino communities. In addition, a 1987 report entitled, *Toxic Wastes and Race in the United States*, published by The United Church of Christ's Commission for Racial Justice, also found that race was the most significant factor in siting hazardous waste facilities, and three out of every five African Americans and Hispanics live in a community housing toxic waste sites. Following these conclusions, representatives of communities and organizations gathered at the First National People of Color Environmental Leadership Summit in 1991 to focus national attention on the issue of targeting minority communities for siting of hazardous waste treatment, storage, and disposal facilities. As a result of the Summit, participants produced "Principles of Environmental Justice" and a "Call to Action," two foundational documents of the EJ movement.

Federal EJ Actions

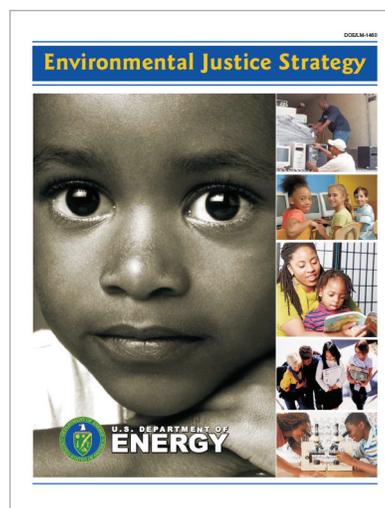
In response to the EJ concerns in communities, on February 11, 1994, President Clinton signed EO 12898, which states that "each federal agency shall develop an agency-wide EJ strategy that identifies and addresses disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Under this EO, federal agencies had to make EJ a part of the federal decision-making process and provide minority and low-income communities access to the decision-making process, as it relates to human health and the environment. Its purpose is to ensure that all communities and persons live in a safe and healthful environment regardless of race, color, or national origin.

DOE and Federal Interagency Working Group on Environmental Justice

In addition, as part of EO 12898, an Interagency Working Group on Environmental Justice (IWG EJ) was established, chaired by the EPA Administrator and comprised of the heads of 17 departments, agencies and White House offices. The role of the IWG EJ is to guide, support, and enhance federal EJ efforts and community-based activities, as well as to develop a dialogue and strategy for future EJ projects. The EPA and the White House Council on Environmental Quality (CEQ) reconvened the IWG EJ in September 2010 for the first time in over a decade. On August 4, 2011, the IWG EJ agencies signed the Memorandum of Understanding on Environmental Justice and EO 12898 to recommit to EJ efforts. As part of this recommitment to EJ, federal agencies are making an effort to making a visible difference in overburdened, underserved, and distressed communities. DOE has been actively working in partnership with other federal agencies and stakeholders to implement policies, programs, and activities to address the needs of communities in proximity to DOE facilities.

DOE EJ Strategies and Implementation Plans

To integrate the requirements of EO 12898 into DOE programs, policies, and activities, DOE developed its first *DOE Environmental Justice Strategy* in 1995. In November 2007, the Department re-established its Environmental Justice Task Force to review and update the *1995 EJ Strategy* and develop a *Five-Year Implementation Plan*. The strategy focuses on human health and the environment in low-income communities, communities of color, and American Indian and Alaska Native communities; provides for public participation in decision-making processes; conducts capacity-building programs; and supports communities through technical support. Since the development of the Strategy and Implementation Plan, the Department has conducted a series of actions to periodically update the Strategy, and the Implementation Plan. In January 2017, DOE updated and is implementing its third Environmental Justice Strategy, which demonstrates the Department's commitment to comply with Executive Order 12898.



■ **MAKING A VISIBLE DIFFERENCE**

To effectively help communities address EJ issues, the intended DOE programs, policies, and activities should impact communities and provide assistance and support to build community capacity and knowledge. Through capacity building and effective education, communities can meaningfully participate in decision-making processes and pursue environmental improvements that can enhance their quality of life and economic opportunity. Since the issuance of the EJ Executive Order in 1994, DOE, along its federal partners, has been working on several policies, programs, and activities to address EJ issues across the country and ensuring that they are making a positive impact in communities. Among these policies, programs, and activities include DOE's efforts beyond the requirements of the Executive Order in providing voices to EJ stakeholders via workshops and conferences, building community capacity through information sharing and training, providing technical support, and partnering with Tribal communities and governments, community organizations, minority serving institutions, and other federal agencies to find solutions to EJ issues. The following are some of DOE's programs and activities that have made a visible difference in communities.

Providing a Voice to Communities

The DOE Environmental Justice Program, coordinated by the Office of Legacy Management (LM), has actively engaged and involved community stakeholders in the decision-making process through public participation in the form of community meetings, workshops, and conferences, such as the National Environmental Justice Conference and Training Program and the Congressional Black Caucus EJ Braintrust. These public participation events provide a platform in which stakeholders can voice their concerns, network with peers, share best practices and lessons learned, and also learn from other community stakeholders, and federal, state, tribal, and local officials on how to effectively address EJ. Below is a summary of public engagement activities that have made a visible difference in the lives of EJ community stakeholders.

National Environmental Justice Conference and Training Program

Since 2007¹, DOE has sponsored the National Environmental Justice Conference and Training Program. Held annually in Washington, D.C., the conference has brought together more than 400 leaders each year from various sectors to engage in free exchange of new ideas and new approaches



U.S. Rep. James Clyburn (D-SC) addressing the Conference participants in 2018.

to EJ. The interactive conference and training program features voices of experience, research, discussions, and thought-provoking dialogue. The conference also allows for stakeholders to share needs and challenges of communities, governments, municipalities, tribes, faith-based organizations, and others with an interest in environmental matters and EJ. The conference seeks to highlight programs and collaborations that work, as well as initiatives that were not successful. Program speakers have featured representatives from federal and state agencies, local governments, Tribes, grassroots organizations, community groups, business and industry, public interest groups, academia, and other entities. It is the nation's largest annual EJ conference.

Historical dates for the National Environmental Justice Conference and Training Program

DATES
April 25-27, 2018
March 8-10, 2017
March 9-12, 2016
March 11-13, 2015
March 26-28, 2014
April 3-5, 2013
April 11-13, 2012
April 27-29, 2011
May 12-14, 2010
May 27-29, 2009
March 26-29, 2008
March 29-31, 2007

¹ Prior to 2011, the Conference was known as the Annual State of Environmental Justice in America Conference.

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Congressional Black Caucus Environmental Justice Braintrust

Established in 1999 and convened annually by Congressman James E. Clyburn (D-SC) at the Congressional Black Caucus Foundation's Annual Legislative Conference, the Congressional Black Caucus Environmental Justice Braintrust brings together stakeholders from various backgrounds, including environmental experts, policy makers, medical professionals, and community activists to discuss issues related to EJ. The goal of the Braintrust is to identify environmental issues and to recommend strategies that will assist policy makers in the development of forward-thinking, comprehensive environmental policy that recognizes and fosters the unique relationship between environmental protection, human health, EJ, and economic development.

Dates and Themes of Congressional Black Caucus Environmental Justice Braintrust Meetings

DATE	EVENT
September 14, 2018	Poverty and the Wealth Gap in the U.S.
September 22, 2017	Infrastructure
September 16, 2016	A Focus on Education
September 18, 2015	Shared Impacts of Climate Change and Environmental Justice
September 26, 2014	Shared Impacts of Climate Change and Environmental Justice
September 20, 2013	A Historical Review of Executive Order 12898
September 21, 2012	Social Determinants & Environmental Justice
September 23, 2011	Using New Technologies to Reduce America's Dependence on Foreign Fuel
September 17, 2010	Securing our Future: Using New Technology to Reduce America's Dependence on Foreign Fuels
September 25, 2009	Jobs and Opportunities in the Green Economy
September 26, 2008	Securing our Future: The Nuclear Alternative
September 28, 2007	Health Disparities and the Environment
September 8, 2006	Securing our Energy Future: From Farm to Fuel
September 23, 2005	Current Legislative Update, Lead from our Past, Hydrogen Technology for the Future
September 9, 2004	Environmental Justice and the Intersection with Health and Economic Development
September 26, 2003	Environmental Justice and the Intersection with Health and Economic Development
September 13, 2002	Policy and Public Participation Forum
September 28, 2001	Building and Sustaining Partnerships that Promote Human Health, Environmental Justice, and Economic Development
September 15, 2000	Building and Sustaining Partnerships that Promote Human Health, Environmental Justice and Economic Development
September 17, 1999	Environmental Justice: Strengthening the Bridge Between Economic Development and Sustainable Communities

Site-Specific Advisory Boards



EM Site-Specific Advisory Board

Site-Specific Advisory Boards (SSABs), also known as Citizen Advisory Boards at certain DOE sites, are established across all DOE sites under the Office of Environmental Management (EM) to acquire stakeholder input on the site's activities and decision-making processes. At the request of the Assistant Secretary or the Site Manager, the Board may provide advice and recommendations concerning certain topics, including: cleanup standards and environmental restoration; waste management; stabilization and disposition of non-stockpile nuclear materials; excess facilities; future land use and long term stewardship; risk assessment and management; and cleanup science and technology activities. Board membership, which reflects a full diversity of views, cultures, and demographics from affected communities and regions, is composed primarily of people who are directly affected by site cleanup activities. Members include stakeholders from local governments, Tribal Nations, environmental and civic groups, labor organizations, universities, industry, and other interested citizens. While only one Federal Advisory Committee Act (FACA) -chartered EM SSAB exists, 8 local boards have been organized under its umbrella charter. They include the Hanford Advisory Board, Idaho National Laboratory Citizens Advisory Board, Northern New Mexico Citizens' Advisory Board, Nevada SSAB, Oak Ridge SSAB, Savannah River Site (SRS) Citizens Advisory Board, Portsmouth SSAB, and Paducah Citizens Advisory Board. DOE maintains a robust public involvement effort at several SSAB sites. For instance, the SRS Citizens Advisory Board, supported by DOE, EPA, and the South Carolina Department of Health and Environmental Control (DHEC), holds EJ meetings co-hosted by EPA and DOE. There are also public workshops on an as-needed basis.

DOE Participation in Stakeholder Meetings

DOE has also been actively participating in stakeholder meetings and community engagement events by providing information to communities about DOE EJ activities as well as providing an opportunity for participants to share their concerns with DOE and assist with identifying issues and problems.

One prominent example of how a DOE-sponsored community engagement event has made a visible difference in communities is the “Revitalize the City of Tuskegee Forum.” DOE co-sponsored the Historically Black Colleges and Universities (HBCUs) Federal Opportunities Institute at Tuskegee University in Tuskegee, Alabama in 2009, where the main concern was the lack of economic development and available amenities in the community, which contributed to the University’s dwindling finances, decreased enrollment, and declining host communities. One possible answer to this problem was to revitalize the community. Following this meeting, the “Revitalize the City of Tuskegee Forum” was formed to improve the local income and increase the University’s ability to recruit and retain high-quality students and faculty members. The Forum attracted more than 100 citizens. The vision focused on education, health care, public safety, and green jobs. Following the local vision presentations, various representatives from state and federal government, the private sector, and philanthropic communities gave their reactions to the local vision along with potential assistance from their agencies. The next step in the initiative was to form essential partnerships to develop a strategic plan to acquire the resources and begin initial activities.

HBCUs FEDERAL OPPORTUNITIES INSTITUTE

DOE created the HBCUs Federal Opportunities Institute in 2009 to provide HBCUs and MSIs with additional tools to support community participation in DOE decision-making processes. The Institute provides HBCUs and MSIs information about Federal programs, and acquaints Federal programs with HBCUs and MSIs with capabilities. The ultimate goal of the Institute is to increase EJ community capacity for participation in decision-making.

Another example of a positive outcome that emerged from community engagement events resulted from two listening sessions during FY2009 focusing on Native American issues. The goal of the sessions was to gain input from Native American communities to assist policy makers in the development of forward thinking and comprehensive plans for key issues concerning Native American communities. As a result of the sessions, DOE is better able to understand and respond to these issues and has improved working relationships with the Tribes and communities that participated in the sessions. The sessions also revealed the need for additional technical assistance for Tribes in the western states. In response, DOE planned three Community Leaders’ Institutes in Indian Country in FY 2010.

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Moreover, DOE has also hosted and participated in several stakeholder outreach meetings across the country to hear and address EJ concerns with the Department, as well as to share DOE EJ programs, policies, and activities with communities. For instance, DOE joined other IWG EJ federal agencies to conduct 18 community dialogues across the country from February to November 2011. Comments and concerns of the community were recorded at each meeting, and DOE provided responses to communities about the relevant concerns that were raised during these meetings. Other stakeholder meetings in which DOE participated in are listed below.

IWG EJ STAKEHOLDER MEETINGS		
MEETING	LOCATION	DATE
IWG EJ Stakeholder Meeting	Bismark, North Dakota	September 4, 2014
IWG EJ Meeting	Biloxi, Mississippi	March 1-2, 2013
IWG EJ at the Council on Environmental Quality	Washington, District of Columbia	May 21, 2013
IWG EJ Title VI and EJ Interagency/Community Workshop	Durham, North Carolina	September 22, 2012
IWG EJ Meeting	Durham, North Carolina	July 16, 2012
IWG EJ Meeting on Goods Movement	Washington, District of Columbia	June 28, 2012
IWG EJ Meeting	Corpus Christi, Texas	April 19, 2012
IWG EJ Deputy's Meeting	Washington, District of Columbia	April 12, 2012
Regional IWG EJ Meeting	Atlanta, Georgia	March 27, 2012

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Community Leaders Institute

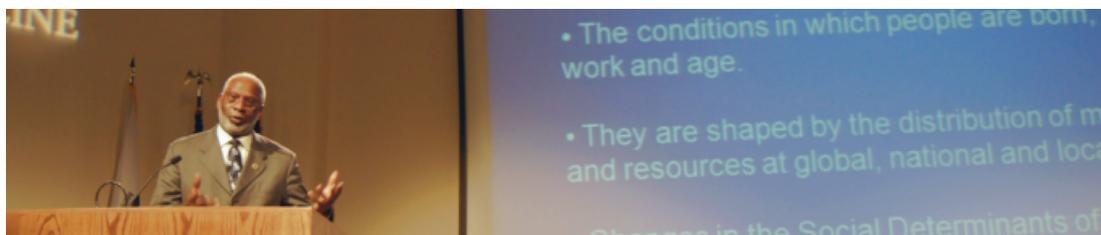
DOE sponsors the Community Leaders Institute (CLI), which is developed and implemented by the Medical University of South Carolina (MUSC). The goal of the CLI is to educate community leaders to access and obtain information that is necessary to make good decisions, as well as communicate this information back to its community members. The Institute helps communities understand energy, environmental, economic development, and other issues, along with the ability to participate in federal decision-making processes. It focuses on the unique relationship between environmental protection, human health, EJ, and economic development. As a result of the Institute, community leaders across the country are able to be informed and take on an active leadership role to encourage the development of their communities. A list of dates and locations for past DOE CLI events is provided below.²

DATE	LOCATION
August 30, 2018	Georgetown, South Carolina
July 27-28, 2018	Ladson, South Carolina
February 22, 2018	Savannah, Georgia
February 20, 2018	Charleston, South Carolina
July 14-15, 2017	Lake City, South Carolina
May 19-20, 2017	Columbia, South Carolina
January 28, 2017	Savannah, Georgia
August 20, 2016	Myrtle Beach, South Carolina
July 16, 2016	Charleston, South Carolina
June 11, 2016	Savannah, Georgia
May 14, 2016	St. Helena Island, South Carolina
April 25-26, 2015	Montgomery, Alabama
April 10-11, 2015	Johns Island, South Carolina
February 27-28, 2015	Atlanta, Georgia
October 3-4, 2014	Nashville, Tennessee
April 25-26, 2014	Montgomery, Alabama
September 6-7, 2013	Savannah, Georgia
May 3-4, 2013	James Island, South Carolina
February 22-23, 2013	Whiteville, North Carolina
February 8-9, 2013	Atlanta, Georgia
October 5-6, 2012	Jackson, Mississippi
July 13-14, 2012	Columbia, South Carolina
May 18-19, 2012	Birmingham, Alabama
March 16-17, 2012	Wadmalaw Island, South Carolina
August 26-27, 2011	Normal, Alabama

² <http://pico.library.musc.edu/CLIs.php>

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DATE	LOCATION
July 29-30, 2011	Blackville, South Carolina
May 20-21, 2011	Florence, South Carolina
April 1-2, 2011	Aiken, South Carolina
August 20-21, 2010	Tougaloo/Jackson, Mississippi
July 16, 2010	St. Thomas, Virgin Islands
May 21-22, 2010	Pleasant, South Carolina
April 2-3, 2010	North Charleston, South Carolina
March 8-9, 2010	Glendale, Arizona
November 6-7, 2009	Hemingway, South Carolina
June 26-27, 2009	Aiken, South Carolina
June 19-20, 2009	Allendale, South Carolina
July 18-19, 2008	Albuquerque, New Mexico
June 27-28, 2008	Denmark, South Carolina
January 11-12, 2008	Albuquerque, New Mexico
May 18-19, 2007	Barnwell, South Carolina
May 4-5, 2007	Williamsburg, South Carolina
July 28-29, 2006	Augusta, Georgia
August 19-20, 2005	Johnston, South Carolina
May 14, 2005	Harleyville, South Carolina
May 6-7, 2005	Williston, South Carolina
November 19-20, 2004	Berkeley, South Carolina
May 14-15, 2004	Denmark, South Carolina
March 5-6, 2004	Waynesboro, Georgia
November 7-8, 2003	Kingstreet, South Carolina
October 3-4, 2003	Aiken, South Carolina
February 21-22, 2003	Allendale, South Carolina
February 14-15, 2003	Columbia, South Carolina
July 30-31, 2002	Blackville, South Carolina



Dr. David Satcher speaks at the Community Leaders' Institute at Morehouse School of Medicine in Atlanta, Georgia in February 8-9, 2013.

Community Capacity Building

As a major proponent of the Science, Technology, Engineering, and Math (STEM) curricula, DOE is working closely with minority serving institutions (MSIs) across the country to educate and train students on energy related issues through workshops, initiatives, and internships. These efforts

prepare students for future career paths that can help develop their communities in ways that can help address EJ concerns.

DOE headquarters and DOE sites have been actively recruiting students from MSIs. Interns have the opportunity to work closely with DOE staff and receive hands-on experience collecting environmental data to provide support to communities to solve environmental issues they are facing.

DOE is also a partner of the Minority Serving Institutions-Community of Partners Council.

The Council held its first meeting on November 21, 2006. The goal of the Council is to increase MSI participation in the work of Federal agencies to assist in managing federally funded programs and expose the institutions to federal procurement programs. The Council is also “committed to utilizing its members to provide programs, activities, and services that strengthen the capacity of MSIs to provide educational excellence, improve financial and physical infrastructure, and effectively participate in federal procurements. The Council is further committed to enhancing the impact of federal programs serving MSIs, and preparing students to be a part of the nation’s workforce and federal employment.”³

EXAMPLES OF DOE INTERNSHIPS

The DOE Office of Energy Efficiency & Renewable Energy (EERE) has been actively working with MSIs to recruit volunteers. The program was significantly enhanced by providing students with more opportunities to network within and outside of EERE by participating and attending hearings on Capitol Hill, training, conferences/meetings, networking opportunities within the Department and other federal agencies, as well as presenting briefings on their accomplishments and experience at EERE. Students were provided with clear direction and expectations that provided them with the necessary tools to be competitive in the workforce.

The Student Temporary Employment Program (STEP), supported by the DOE Bonneville Power Administration, assists the recruitment of minority, low-income, and Tribal interns, and provides interns with the knowledge and resources to facilitate ideas that positively impact their environment. Interns participate in activities such as forums, evaluations of programs, policies, and activities, to determine if environments present disproportionately high and adverse human health or environmental effects on minority, low-income, and Tribal populations.

³ <http://msicopc.org/about-us/>

Education, Training, and Career Development

Education and training is one of the most effective ways to address EJ concerns, as it allows stakeholders to be able to be involved and participate meaningfully in the decision-making processes to improve their communities. Over the years, DOE has been effectively educating and training stakeholders, including community leaders, community members, and DOE staff, to build the capacity of communities. DOE has accomplished this by partnering with minority-serving institutions, community leaders, and other key stakeholders across the country to provide the information, technical support, and resources needed to adequately build community capacity to make a visible difference in EJ communities.

Superfund Job Training Initiative

From December 2008 to August 2010, DOE partnered with the Superfund Job Training Initiative (Superfund JTI) at the SRS in Aiken, South Carolina to prepare disadvantaged individuals from nearby communities that have been disproportionately impacted by environmental hazards for employment opportunities at the



Savannah River Site Superfund JTI pre-employment job skills training

Site. The Superfund JTI, a job readiness program funded by the EPA, is a partnership among DOE-Headquarters, DOE-SRS, Savannah River National Library, Parsons Corporation, and the Imani Group (a community-based organization). The program ran two cycles during the two years, and provided classroom and hands-on technical training as well as life skills training to adequately prepare trainees for a successful career path. The Superfund JTI benefits communities by⁴:

- Increasing understanding of site conditions and cleanup efforts.
- Providing individuals with marketable skills that enhance employment potential.
- Enabling community members to play active roles in the protection and restoration of their neighborhoods.
- Providing assistance with job placement.

During the first cycle, 19 program graduates secured full-time employment at SRS. Three additional individuals were offered full-time employment as soon as they receive their general equivalency diplomas. During the second cycle, 28 candidates were administered exams and offered positions as: General Production Operators, RadCon Auxiliary employees, and Temporary Material Handlers. Overall, the Superfund JTI program at the SRS succeeded in recruiting, training and employing approximately 50 people.

⁴ <http://semspub.epa.gov/work/11/174947.pdf>

WORKER TRAINING SUCCESS STORY

Leslie Hartley, Superfund JTI Graduate

After two years of working at the Savannah River Site, Leslie Hartley knows his way around the large site, which Leslie says, “is like a military installation” with areas sectioned off for different types of work. After graduation, Leslie started working in the “F” area working to unpack material waste. Since then, the man who graduated with the class award for “Einstein,” has trained as a building operator and is now pursuing training as a Multi-Skilled Technician, a role that allows for versatility to work in several areas such as radiation control, electrician work and valving. The training is part of a project to build a facility on site, and Leslie hopes to complete training to be part of a certification crew and continue to work as a subject matter expert on the facility after it is built.

“Nothing is guaranteed in life,” notes Leslie as he witnesses management changes and layoffs due to a reduction in force. But Leslie remains focused on his training and credits Superfund JTI with the perseverance and commitment to his success.

“The Superfund Job Training Initiative turned my life 180 degrees.” Whereas, pre-program, Leslie was living without heat and hot water, struggling to pay the rent, and had no real career prospects, Leslie has taken back full control of his life. “I had no reserves or contingencies should the worst happen, but now I have insurance, a 401K-type plan and savings.”

Today, Leslie has happily switched from driving hand-me down repair nightmares to a brand new pickup truck and has purchased a new home overlooking a pond in Augusta, Georgia. As Leslie unpacks and settles into his new home, Leslie remembers the extra ‘lift’ that Superfund JTI has given him. “I’ve already gotten more blessing from this program than I ever could have expected.”

Source: EPA <http://www2.epa.gov/superfund/making-difference-superfund-job-training-initiative#tab-2>

Teaching Radiation, Energy, and Technology (TREAT) Workshops

DOE partners with Savannah State University to develop and carry out the Teaching Radiation, Energy, and Technology (TREAT) workshops. The overall goal of the workshops is to educate kindergarten through 12th grade teachers and local community leaders who reside near the DOE SRS facility in Aiken, South Carolina about radiation, sources of radiation, radioactive waste management, effects of radiation on environmental health, and the negative impact of environmental radiation exposure to humans. The workshops are designed to educate the teachers so that they can provide essential information to their students with hopes of potential career opportunities in engineering and nuclear fields. Teachers also hope to take the radiation education message to their students and ultimately to the community.

Overall, this project has made it possible for the successful implementation of TREAT and has trained over 400 community workers and K-12 teachers. During FY 2011 and 2012, ten students graduated with a B.S. degree in environmental science. Of these numbers, four students were working for their master's degree at various institutions. In addition, this collaborative activity also develops public involvement programs for adversely impacted communities and conducts public meetings and workshops. This collaboration is recognized as a model EJ program for communities around federal facilities.



Teachers, community members, and students during Teaching Radiation, Energy, and Technology Workshop— Aiken, South Carolina

Pipeline Development Program

Since 2009, DOE has partnered with the MUSC to sponsor the Pipeline Development Program. The Program is designed to expose lower-income and minority middle and high school students to STEM disciplines and to encourage them to pursue careers in those areas. The schools are located in rural South Carolina. Students are exposed to STEM-related activities that they would otherwise not be afforded the opportunity to experience, and provided resources for them to participate in these activities. The Program also provides counselors, teachers, and students with information and education opportunities that enhance skills and knowledge in STEM disciplines; assists teachers in providing STEM literacy for students; provides opportunities for students and teachers to participate in workshops and exhibitions to further STEM awareness; and identifies professionals in the math, science, engineering, and medical professions as potential speakers to talk with students about careers in the STEM areas.⁵



Cross Middle School Students at the aquarium

⁵ http://energy.gov/sites/prod/files/2014/01/f6/2013_Q4_0.pdf

Environmental Justice Institute with Allen University

DOE and Allen University established an EJ Institute at Allen University in October 2015. Allen University was founded in 1870 and is a private Christian Liberal Arts HBCU located in Columbia, SC. Allen University is recognized as the first university in South Carolina founded by African Americans for the education of African Americans. The University's purpose is to prepare leaders who are skilled in communication and critical thinking, and who demonstrate high moral character. Their aim is to provide an environment of academic excellence in order to heighten their students' chances of succeeding in a culturally diverse and economically global world. Allen University desires to follow a Total Life Curriculum model, which addresses preparation of the whole person for a life of service.

The EJ Institute will work with EJ communities to promote a major focus on youth development; to attract and mentor students toward the STEM discipline; and to build a sustainable pipeline for training, education, and employment. This collaborative partnership will plan, develop, and implement an EJ Institute to be a community sustainable resource center for rural and economically challenged minorities and low-income populations around the DOE's SRS in Aiken and other communities in South Carolina. Another goal of the Institute is to promote environmental, sustainable, and healthy communities by enabling them to address the burden of EJ issues through strategic partnerships and programs. These objectives will be achieved and the goal realized by the accomplishment of a three-phased intervention. The interventions are: 1) engagement, 2) education, and 3) empowerment. The implementation of this Institute will demonstrate broad-based collaboration with strategic partners and will help reduce costly duplication efforts, while achieving the goals of the community's needs.

GWU ENVIRONMENTAL RESOURCE POLICY CAPSTONE SUCCESS STORY

In 2013, participants of the GWU Environmental Resource Policy Program worked with DOE staff to research uranium contamination on the Wind River Reservation in Riverton, WY. Students audited DOE's remediation and communications plan on a former uranium tailings pile on the Reservation. They traveled to the site and met with members of the Northern Arapaho and Eastern Shoshone tribes to discuss comprehensive communications strategies and necessary environmental improvements for the site and the community.

George Washington University's Environmental Resource Policy Capstone Project

DOE has partnered with George Washington University's Environmental Resource Policy Capstone Project. The Project is a partnership between the Department and George Washington University. The course provides students in the graduate program of Environmental Resource Policy hands-on experience in the Department's Environmental Justice Program. The students analyze current environmental and energy issues and identify recommendations or strategies for the Department. The students earn three credits for the course.⁶

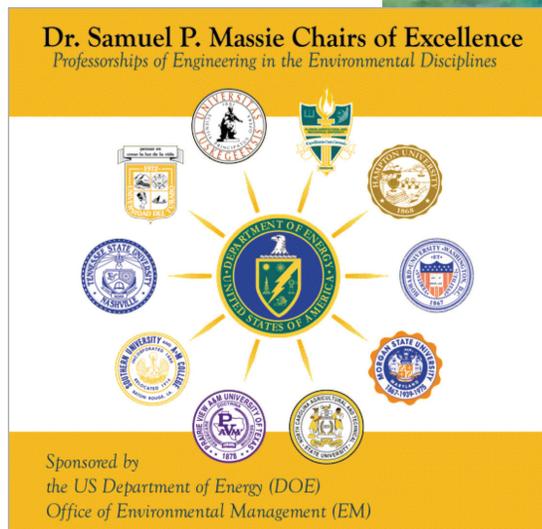
⁶ <https://enrp.columbian.gwu.edu/capstone-project>

Public Engagement, Education, and Outreach Accomplishments Report:

Making a Visible Difference in Environmentally Overburdened, Underserved, and Economically Distressed Communities

Massie Chairs of Excellence Program

In 1994, DOE established the Dr. Samuel P. Massie Chairs of Excellence Program to assist its member institutions in producing top-level graduates in environmental disciplines and to produce groundbreaking environmental research. Comprised of fourteen HBCUs and Hispanic Serving Institutions, the Program has a team of world-class scholars, researchers, and educators who work to develop innovative and cutting-edge technologies through research and development in applied science and engineering, environmental technology, national defense technology, homeland security, and nuclear non-proliferation studies. It is also through the Program, and in conjunction with the U.S. Department of Agriculture, that DOE has created community technology centers by distributing more than 5,000 computers to underserved communities. The Massie Chairs engineering schools produce more than 30% of all African American engineers in the U.S.



Minorities in Energy Initiative

The Minorities in Energy Initiative (MIE), guided by DOE's Office of Economic Impact and Diversity, seeks to address the needs of underrepresented communities in the energy sector. The goal of the Initiative is to create a substantive, sustainable model that connects diverse stakeholders together to address challenges and opportunities for minority engagement in energy economic participation, STEM education, and climate change. The Initiative also seeks to inspire youth from underrepresented communities to pursue careers in energy and support their advancement to leadership positions. MIE activities focus on the three primary goal areas of STEM education and workforce development, energy economic development, and climate change.

EXAMPLE OF DOE SUPPORT IN STEM

In 2012, the National Nuclear Security Administration (NNSA) provided \$8.4 million in funding to MSIs to advance scientific research, student internships, faculty fellowships, and curriculum development. Of the total \$8.4 million awarded, \$4.4 million was awarded to the MSI program, which includes support to DOE'S Dr. Samuel P. Massie Chairs of Excellence Program; and grants that support Native American and Hispanic academic development and advancement in STEM. The remaining \$4 million was used to initiate DOE's new MSI Partnership Program in which the objective is to build a sustainable educational pipeline in STEM. The program allows specific HBCUs the opportunity to collaborate with national laboratories around specific topical areas of interest to NNSA and also in a consortium capacity. Eight consortium grants were funded with the award monies.

Mentorship for Environmental Scholars Program

The Mentorship for Environmental Scholars Program (MES) is a collaboration between Pre-College University and the DOE to increase minority awareness and participation in the environmental science disciplines. The MES is a 10-week, paid summer internship that recruits qualified undergraduate students from HBCUs, HSIs, and tribal colleges. The program encourages applications from undergraduate students traditionally underrepresented in the areas of biotechnology, computer science, environmental science, business administration, public administration, physical science and engineering. The program also seeks to provide talented undergraduate students with exposure to the numerous research and educational opportunities that are available within DOE. The program provides STEM laboratory research facilities and experiences. Students receive extensive professional development and training in their field of study that will pipeline them toward gainful employment within DOE.

Partnerships and Representation

Partnering with communities, state, local, and Tribal government, and other stakeholders is an effective way to engage with communities and work with them to find possible solutions to issues. DOE has formed essential partnerships with federal, state, and local government stakeholders, including EJ communities and Tribal governments and communities. Some of these partnerships are described below.

INCREASE TRIBAL KNOWLEDGE

DOE Economic Development (ED) cohosted a breakout session on Education and Economic Development Opportunities during the 2011 DOE Tribal Summit to provide guidance for Tribal-owned small businesses, Tribal-owned financial institutions, Tribal colleges and universities, and others seeking to work with the Department. ED staff also regularly reach out to Tribal organizations and Summit attendees to share information on contracting opportunities for Tribal-owned businesses and Alaska Native corporations. To increase awareness within the Department, ED partners with the Office of Indian Energy Policy and Programs to host Tribal training at the Joint DOE/DOE Contractor Environmental Attorneys' Training. Additionally, ED developed a class entitled "Energy Development in Indian Country" that was offered to DOE employees as part of DOE's Native American Heritage Month programming.

Collaboration with Tribal Governments

In order to build capacity of Tribal communities and address EJ concerns, DOE sites are actively engaging and collaborating with Tribal governments and communities. DOE is working to incorporate EJ principles in its collaboration with Federally-recognized Tribes in building capacity to establish public participation, community involvement, education, and communication systems to engage with Tribal members and others affected by Tribal programs. For instance, EM has maintained 15 cooperative agreements with specific Tribes around EM sites/facilities and with Tribes along routes used to transport EM wastes and materials. As a result of the agreements, national meetings are held. EM provides funding for the State and Tribal Government Working Groups, as well as the Tribal Leader Dialogues. The EM Assistant Secretary and other senior EM staff attend these meetings to discuss and address various issues of concern.

Partnership with Tribal Communities

The Los Alamos National Laboratory (LANL), Sandia National Laboratories (SNL), and Hanford Federal Facility have maintained a close partnership to involve Tribal communities and governments in the sites' activities, programs, and policies. DOE has worked at LANL to strengthen its engagement with Tribal governments and indigenous communities, and fulfill its trust responsibility to Federally-recognized Tribes. LANL and the National Nuclear Security Administration (NNSA) funds programs that allow 4 Pueblo governments to develop and maintain environmental monitoring programs specific to their respective communities and to provide technical input to NNSA decision making processes. The program also funds a community-based educational model (CBEM) initiative at Santa Fe Indian School that incorporates a STEM curriculum. The SNL has offered summer internships to Native American college students as a means of providing opportunities to conduct research, participate in a cross-disciplinary team, and provide hands-on experience working on Tribal energy projects through the Tribal Energy Program. The Hanford Federal Facility Agreement, also known as Tri-Party Agreement, focuses the site's environmental restoration and cleanup activities and ensures their effectiveness. The agreement includes a Community Relations Plan, which encourages involvement of Tribal nation representatives and members of minority, low-income, and Tribal populations, in the Agreement modification and decision-making processes.



Sandra Begay-Campbell (center) with interns Devin Dick, Tammie Allen, Gepetta Billie and Chelsea Chee at Sky City within the Pueblo of Acoma. Begay-Campbell is describing how a photovoltaic panel works to generate electricity. (Photo by Randy Montoya) https://share.sandia.gov/news/resources/news_releases/tribal-energy/#.VkYVXNB20V5

Partnership with Community-Based Organizations

DOE provides financial and technical support to community-based organizations that have been working on addressing EJ issues in their communities. For example, DOE provided financial support to Harambee House, Inc./ Citizens for Environmental Justice, a community-based organization based in Savannah, GA, to host the Black Youth Leadership Development Institute (BYLDI). The Institute seeks to engage youth, their parents, community organizations, leaders, and allies in building a web of support that nurtures the leadership abilities of youth while raising their consciousness regarding the environmental health problems impacting their communities. The BYLDI has an intentional focus on building youth leaders from targeted communities and connecting those youth leaders to existing organizations within their communities.⁷

Environmental Justice Interagency Working Group Demonstration Projects

As a member of the IWG EJ, DOE partnered with other Federal agencies, State and local governments, Tribal governments, community-based organizations, academia, business and industry, and non-governmental organizations to provide technical support to communities impacted by environmental hazards through the IWG EJ Revitalization Projects. Over thirty projects across the U.S. were chosen with the objective of applying the collaborative problem-solving model between 2000 and 2003, which ensures problem-solving and sustainable solutions to a range of environmental, public, social, and economic issues associated with EJ. DOE, along with other government agencies, businesses, and community organizations, led efforts to organize an alternative fuels summit, which focused on accelerating the conversion of cleaner fuels of fleets operating in the New York City metropolitan area. DOE also partnered with Bethel New Life, a faith-based community development corporation in Chicago, Illinois, to conduct an assessment to develop an area in the West Garfield Park community of Chicago into a “power park.”⁸

Technical Support to Communities

DOE has been actively providing technical support to communities that have been disproportionately impacted by environmental hazards. The technical support helps empower communities and build their capacities so that they can take necessary actions to address EJ issues. In addition to the human health assessments that DOE staff perform in communities to assess environmental hazards around DOE sites, DOE also conducts technical workshops and training for community members.

⁷ <http://byldiharambeehouse.blogspot.com>

⁸ <http://www3.epa.gov/environmentaljustice/resources/publications/interagency/iwg-status-02042002.pdf>

Technical Assistance Workshops

Through the MUSC, DOE has hosted Technical Assistance Workshops, which are designed to emphasize essential “how-to” skills needed for preparing and managing a good grant application. Experts lead hands-on sessions in finding available grant funding agencies, including planning, preparing and submitting a grant application. Community leaders who attend the workshop are better prepared to submit a complete proposal that can possibly win grants to improve their communities.⁹

Dates and Locations of Technical Assistance Workshops

DATE	LOCATION
June 3, 2017	Columbia, South Carolina
September 28, 2013	Columbia, South Carolina
March 9, 2013	Wadmalaw Island, South Carolina
March 10, 2012	Blackville, South Carolina
February 16-17, 2012	St. Croix and St. Thomas, U.S. Virgin Islands
July 16, 2011	St. Croix, U.S. Virgin Islands
July 15, 2011	St. Thomas, U.S. Virgin Islands
December 4, 2010	Waynesboro, Georgia
September 20, 2010	Phoenix, Arizona
August 28, 2010	Augusta, Georgia
June 26, 2010	Kingstree, South Carolina
March 20, 2010	Orangeburg, South Carolina
June 6, 2009	Denmark, South Carolina
March 6, 2009	Albuquerque, New Mexico
October 20, 2007	Charleston, South Carolina
March 24, 2007	Williston, South Carolina
February 25, 2006	Graniteville, South Carolina
August 27, 2005	Orangeburg, South Carolina

⁹ <http://pico.library.musc.edu/CLIs.php>

■ RECOMMENDATIONS

While DOE actions to date have made a significant and visible difference in addressing public engagement, education, and outreach issues in a number of communities, additional efforts can be made to continue this support. The following are some recommendations to DOE on how to increase their efforts to provide additional support to communities.

- ***Increase DOE participation in stakeholder engagements.*** DOE should participate more in stakeholder engagements (e.g., listening sessions and conferences) to better understand the various EJ issues that exist in proximity to DOE sites, as well as to inform stakeholders of DOE policies, programs, and activities that can help to address these issues.
- ***Continue to support worker training programs for DOE stakeholders.*** DOE should continue to support, as well as fund, worker training programs, such as the SuperJTI or the National Institute of Environmental Health Sciences (NIEHS) Worker Training Program (WTP), at DOE sites. These programs are important as they not only help to train individuals from communities impacted by environmental hazards on the technical skills to perform the job, they also prepare individuals to be successful in life with life skills training.
- ***Expand the Community Leaders Institute Program and Technical Assistance Workshops across the country.*** The successes and importance of the Community Leaders Institute Program workshops and Technical Assistance Workshops demonstrate that they should also be replicated throughout the country near more DOE sites. These programs prepare community leaders to become “better informed” leaders in order to best address EJ issues in their communities.
- ***Continue to conduct and sponsor the National Environmental Justice Conference and Training Program.*** Given the successes of the annual National Environmental Justice Conference and Training Program in providing a forum to discuss and address EJ issues, the Conference should continue to be supported in the future.
- ***Continue to work with Tribal communities and Tribal governments.*** DOE sites situated around Tribal communities should increase efforts in working with Tribal communities and Tribal governments to address EJ issues. Examples of successful partnerships are the Hanford Tri-Party Agreement, and LANL’s partnership with nearby Tribes and Tribal governments.
- ***Increase community presence on Site Specific Advisory Boards.*** DOE sites should increase community presence by ensuring that at least one member of an EJ community sits on the Board to bring EJ issues to the attention of the site manager and other stakeholders.

- **Work with State and local governments to address EJ issues.** DOE should continue working directly with State and local governments to address EJ concerns, as many of the issues are community-specific.
- **Continue to partner with other federal departments and agencies.** Partner with other federal departments and agencies who have been involved in addressing EJ concerns across the country where DOE site issues exist.
- **Create pilot programs to address EJ issues in communities in proximity to DOE sites.** DOE should create small funding opportunities to help fund improvement projects in EJ communities, such as the EPA EJ Small Grants Program, in proximity to DOE sites.
- **Continue to partner with Minority Serving Institutions.** DOE should continue to partner with Minority Serving Institutions across the country, e.g., continue to promote STEM curricula through programs like TREAT.
- **Create an Environmental Justice Coordinator position at DOE site locations, where needed.** For DOE sites that currently do not have an Environmental Justice Coordinator, the position should be created. An Environmental Justice Coordinator would serve to be the point of contact for all EJ-related matters for the site, as well as coordinate and inform Headquarters of site-specific EJ matters.
- **Ensure that DOE site contracts support EJ efforts.** DOE site contracts should contain provisions providing EJ mission support to DOE site managers and staff.

■ CONCLUSIONS

Since the issuance of Executive Order 12898, DOE has made a conscious effort to address EJ issues in communities that are disproportionately affected by environmental hazards and its program, policies, and activities are making a visible difference in communities. DOE has done this through its public engagement, education, and outreach initiatives. This report describes some of the ways DOE has provided support to environmentally overburdened, underserved, and economically distressed communities for almost 25 years. This important work should continue in the future.



■ **APPENDIX: METHODOLOGY**

A broad literature review of DOE strategic documents, program updates, fact sheets, and DOE partner websites and documents were conducted to prepare this report.

DOE materials reviewed include:

- DOE Environmental Justice Strategy
- DOE Environmental Justice Accomplishment Reports
- DOE Environmental Justice Implementation Plan
- DOE Office of Legacy Management Quarterly Reports
- DOE Conference and Meeting Summaries

Finally, discussions were held with the DOE EJ Program Manager in the Office of Legacy Management, and other DOE officials at various DOE sites.

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Doing Well by Doing Good

