

**DIRECTING ENVIRONMENTAL JUSTICE TOWARDS A CAPACITY BUILDING
MODEL FOR THE DEPARTMENT OF ENERGY**

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INTRODUCTION

Environmental Justice is a policy every federal agency and department struggles to interpret and implement in a fair and responsible manner according the requirements of Executive Order 12898¹. The Council of Environmental Quality (CEQ) is the lead agency to oversee the implementation of environmental justice and to give guidance for incorporating environmental justice into the NEPA (National Environmental Policy Act) process.² The environmental justice movement focuses on distributive justice theory, that no underprivileged community should host health and social burdens of society's polluting facilities while receiving little benefits from the facilities. Thus, conducting an environmental justice investigation is a statistical exercise to determine if the study area meets specific empirical number requirements for three areas: minority population, low-income population, and health, culture, or Socio-economic disproportionate impacts on minority and/or low-income communities. The CEQ's and E.O. 12898 rhetoric leads all environmental justice policies to focus on the study area's population demographics before proceeding with mitigation efforts.

This paper will; discuss the limitations of the distributive justice approach for implementing environmental justice policy, give examples of how current implementation procedures are not achieving environmental justice; and present a capacity-building environmental justice approach as a new direction for Department of Energy and other federal government departments and agencies. The paper presents two case studies, one to demonstrate the weaknesses of the current environmental justice policy and another to demonstrate how a DOE site can add a capacity building component to their environmental justice efforts.

DISTRIBUTIVE JUSTICE—CAUSE AND EFFECTS

Environmental justice is a community-based policy that attempts to level the playing field between governments and community groups. The end goal of environmental justice is that all segments of society have the opportunity to participate in decision-making processes for their community. EO 12898 and subsequent federal departments' environmental justice strategies have created a distributive justice paradigm. The process developed by the CEQ requires each federal department and agency to begin environmental justice investigation with a demographic study³ This study is done as part of the NEPA process and presented in the Environmental

Impact Statement (EIS). The environmental justice investigation is complete if the study area's population does not meet the 50% minority and/or low-income population criteria. Although this process achieves distributive justice, it accomplishes only an illusion of environmental justice.

NEW STRATEGY FOR ENVIRONMENTAL JUSTICE—CAPACITY BUILDING AND ECONOMIC DEVELOPMENTS FOR IMPACTED COMMUNITIES

Federal procedure and theory of environmental justice is based upon the movement's connection with Title VI of the Civil Rights Act. Early court cases, such as *Bean v. Southwest Waste*,⁴ were filed pursuant to Title VI, however, the plaintiff failed to prove "purposeful discrimination," a requisite of Title VI. Because of this history, the rhetoric of EO 12898 and the subsequent CEQ's *Environmental Justice Guidance Under the National Environmental Policy*⁵ concentrates on proving disproportionate impact and environmental racism. Environmental justice aims to empower disadvantaged communities so that big government and industry will not take advantage of the community's lack of knowledge on environmental restoration. However, as case study one will demonstrate, communities are not empowered through the current environmental justice strategies and implementation procedures.

The distributive justice paradigm cripples the environmental justice movement from progressing to a course which will achieve true justice; that impacted communities will have the capacity to participate fully in local restoration projects and national policies. A new approach is necessary to replace the current emphasis on disproportionate impacts and defining a specific area as an environmental justice community.

The Federal Facilities Environmental Restoration Dialogue Committee final report published in 1996 addresses environmental justice action. The report has three conclusions in respect to environmental justice:

- Tribes, low-income and minority communities have not been included during the decision-making process
- States and Tribes are burdened by the necessity for technical and policy training which allows them to acquire and maintain a capacity level to fulfill their regulatory roles and serve as equal partners
- Environmental justice should focus on achieving equality through capacity building for impacted communities.

"The Committee recommends that federal, state, tribal and local governments take special efforts to consult with groups that have been commonly excluded and to expand and develop their capacities to participate effectively in such processes, where needed."⁶ The Committee developed a brief list of fundamentals that a capacity building program should include, which are the building blocks for a capacity building program.

IMPLEMENTATION OF CAPACITY BUILDING THEORY

The first step to capacity building is to develop a comprehensive education program that addresses the community's current needs and builds a foundation for the community's future needs. It is important to note that a one-size-fits-all policy is inappropriate as each community

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has different weaknesses and strengths. The federal agency's environmental justice administrator should work in cooperation with community leaders to develop a capacity building plan tailoring the community's needs. However, there are three basic elements to be included in a capacity building agenda:

- Training and technical assistance programs.
- Internships, fellowships and scholarships for students from affected communities.
- An approach for education curriculum to including working experience within federal agencies and community organization.

Implementing a capacity building environmental justice program should be proactive, meaning federal departments and agencies are employing a community capacity building program before beginning the NEPA process. The impacted community will then have skilled personal able to provide technical expertise necessary to participate equally with federal agencies and departments.

The current environmental justice strategies do not directly include economic development. A federal facility has many economic opportunities available during development, operation and closure for surrounding communities. The economic opportunities include employment on site and contracting opportunities, which increases the local community's cash flow. Disadvantaged groups can not benefit from these opportunities because they do not have the tools necessary to capitalize on the opportunities. For example, high paying jobs at the facility require technical skills. The contracting companies must be able to perform a high level of technical assignments necessary for the site. Impacted communities usually do not have the monetary means or the advance public school system to receive a college education in the appropriate fields of study or the necessary technical training. Without purposeful intention, the federal facility has marginalized neighborhoods and populations of the impacted communities. After a facility is closed and new economic development plans are projected for the former site, the local community must have a voice for future economic developments. Too often, a federal facility is replace with a private facility that marginalizes the same populations for the same reasons. Although the community may be hosting a more environmentally friendly facility, they still are not sharing in the economic benefits. An education program which is focused on developing the community's capacities is the first step to improve this disparity, but the marginalized groups' skills and desires must be considered in future economic development plans.

Education and improved economic conditions is key for achieving the desire objective for environmental justice which also includes communication dialogue between all sections of society and the federal government. Too often, the federal government heavily weights the dialogue with commonly excluded groups. The community must be able to share the federal government their plan for the facilities and why they have included certain aspects into the plan. This communication should teach the facility administrators about the cultural, needs, values, beliefs and history of the people and the land. However, the community must be willing to listen and involved the federal departments and agencies. A two-way dialogue allows philosophies to be shared and thus decisions can be made which considers all aspects of the situation.

CASE STUDY 1

Department of Energy, Office of Fissile Materials Disposition is currently in the process of completing a Draft Environmental Impact Statement for disposal and storage of surplus plutonium. The *Surplus Plutonium Disposition Draft Environmental Impact Statement* (SPD Draft EIS) “identifie[s] the potential environmental impacts of reasonable alternatives for the proposed siting, construction and operation of three facilities for plutonium disposition. These three facilities would accomplish pit disassembly and conversion, immobilization, and MOX fuel fabrication.”⁷ EO 12898 requires the DOE to conduct an environmental justice investigation for SPD Draft EIS and include the findings in appropriate NEPA documents. The DOE follows the CEQ’s *Environmental Justice Guidance Under the National Environmental Policy Act* for instructions to conduct an environmental justice analysis. The analysts separate the study into three sections : spatial resolution, population projections and results for the reactor sites. Based on the CEQ guidelines, DOE first determines if a minority or low-income population exists. The preferred database for this information is the 1990 US Census. The study concentrates on gathering demographic information focusing on minority and low-income population estimates for 2015 and environmental effects on minority and low-income populations residing near the three proposed sites. DOE analysts use statistical methods to predict the study area’s future demographic composure. “Populations in 2015 were then projected from the baseline data under the assumption that percentage changes in the majority and minority populations residing in the affected areas will be identical to those projected for state populations.”⁸ The conclusion is the minority population and low-income population in the study area will increase, but will still not meet the current 50% or more criteria for an environmental justice case to be established. Based on health risks, analysts determined that “no radiological fatalities are likely to result from implementation of the proposed action or alternatives,” and “[n]onradiological risks to the general population are also small regardless of the racial and ethnic composition or economic status of the populations.”⁹ With this study, the Department of Energy has fulfill all environmental justice requirements and is complete compliance with all environmental justice policies, therefore, no further actions are required.

CASE STUDY 2

Case Study one demonstrates how current environmental justice practices does not encourage a two way dialogue, economic development or increased capacities for the impacted area. Federal departments and agencies do not have funds appropriated for environmental justice programs. Rocky Flats Environmental Technology Site (RFETS) provides a good example of how a federal site can successfully add capacity building to their environmental justice efforts.

RFETS, formerly known as Department of Energy Rocky Flats Field Office, was in production from 1952-1992. Established at part of the United States nuclear complex system, the site specialized in the production of plutonium triggers (pits), which are the detonators for nuclear warheads. The site is located fifteen miles northwest of Denver, Colorado in the foothills of the Rocky Mountains. The site is 6200 acres with most of the structures located on 385 acres. The rest of the area is used as a security/contamination buffer zone¹⁰. In 1992 President Bush cancelled Rocky Flats’ mission and announced site closure. The site was then renamed to

described its new mission to “[m]anage wastes and material, clean up and convert the Rocky Flats Environmental Technology Site to beneficial use in a manner that is safe, environmentally and socially responsible, physically secure, and cost-effective.”¹¹ RFETS clean up is schedule to be completed by 2006.

RFETS is a superfund site which requires the Site to follow the NEPA process for all closure plans. Environmental justice is part of the NEPA process that Rocky Flats must consider¹². To do this, Rocky Flats adopted the DOE’s general environmental justice strategy¹³. The DOE strategy guidelines are as follows:

- Identify and assess programs, policies, and activities of the department, which have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations.
- Ensure that departmental programs, policies, and activities effectively utilize and are consistent with applicable environmental requirements and civil rights law and regulations for addressing human health or environmental hazards.
- Enhance the credibility and public trust of the department by making public participation a fundamental component of all program operations, planning activities, and decision-making.
- Improve research and data collection methods relating to human health and the environment of minority and low income populations by incorporating full characterizations of risks, including the identification of differential patterns of consumption of natural resources among such populations.
- Further departmental leadership by integrating environmental justice criteria, as appropriate, with activities and processes related to human health or the environment¹⁴.

DOE environmental justice strategy includes all the goals required by EO 12898 which are based upon rhetoric for eliminating environmental racism. Rocky Flats had already established a Site-specific Citizens Advisory Board, which became the vehicle for minority and low-income public participation.

Early in the site closure process, RFETS began a Site Wide Environmental Impact Statement (SWEIS). Although the document has not been completed, the environmental justice assessment was finished and is used by RFETS as an unofficial guidance. The SWEIS concludes that RFETS does not have an environmental justice case based on the following findings:

- No minority or low-income neighborhoods are located within a 10-mile radius of the Site.
- No cultural impacts because minorities or low-income populations do not use any specific historic, cultural, or ecological resources within the study area.
- No significant minority or low-income populations along transportation corridors. All populations are exposed equally.

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- No disproportionately high or adverse impacts have been identified from radiological or nonradiological ambient air emissions under baseline conditions for any segment of the populations.
- No relevance for identifying differential patterns of consumption of natural resources because the Site is located in an urban area and the surrounding community forgo subsistence farming¹⁵.

RFETS does not have to initiate an environmental justice mitigation plan because of the findings. RFETS has met the CEQ Guidance, followed the Department's environmental justice strategy and EO 12898 requirements. The results are in complete compliance of environmental justice policy, as it is currently perceived.

RFETS AND CAPACITY BUILDING

RFETS does not have to develop or explore the environmental justice issue any further, nonetheless, RFETS, Office of Civil Rights and Diversity (OCRD), has developed a capacity building program in conjunction with environmental justice policy. Environmental justice is an unfunded mandate from the White House. EO 12898 requires federal agencies and departments to comply, but there has not been extra funds allocated for development of an environmental justice program. Notwithstanding, environmental justice capacity building can be accomplished without complex programs and a large budget. RFETS' administrators have demonstrated this at RFETS.

RFETS's budget includes discretionary grant funds for science education. The OCRD utilizes this program to enhance RFETS's role in building the capacities of surrounding communities for present and future generations. The grant awarding process is competitive to encourage a high quality of proposals. The grants selections panel chooses to fund proposals that focus on technical training, education and environmental justice research for disadvantage communities. The Site is currently working with Historical Black Community Colleges and Universities (HBCUs), Tribal colleges and non-profit organizations to facilitate internships, technical training and science education programs.

RFETS funds a Student Internship/Co-Op Assignments, Cooperative Developmental Energy Program Scholarship/Dual Degree Program (CDEP). RFETS works directly with Ft. Valley State College from Ft. Valley Georgia, an HBC. CDEP works with 117 Historically Black Colleges and Universities to operate the largest specifically focused energy internship program. "Students enroll at Ft. Valley State College for three years and major in Mathematics; then students transfer to the University of Nevada Las Vegas the last two years and major in Electrical Engineering or Environmental Restoration and Waste Management."¹⁶ Graduating students receive a B.S. from both schools. To supplement the classroom study, CDEP funds students in internships and co-op assignments to prepare these students for a future positions within an energy company or governmental agency.

Another program that RFETS sponsors is the Southwest Community Outreach (SWCOC) Science Literacy Program. "The goal of SWCOC is to develop and establish educational and

training programs in science and engineering that will increase the participation of Hispanics in energy and environmentally related careers. SWCOC partner[s] with the Hispanic community, City and county of Denver, the State of Colorado, area corporations, and institutions of high learning.”¹⁷ The goals and programs of SWCOC are to provide technical training programs, internships and tutorial help for Denver area Hispanic college students.

RFETS wanted a variety of education training programs to reach a diversity of cultures and age levels. Colorado State University’s “Exploring Science and Engineering Career Opportunities” education program reaches over 5,000 middle school age children in the Denver Public School System. The University sets up a variety of awe-inspiring demonstrations illustrating applications of physics and engineering. The college students then spend a few hours mentoring to encourage students to engage in a science or engineering career.

A second program designed to include a variety of ages and skill levels is the “Energy Education Workshop for Women and Minorities.” This program trains minorities and women from the young age of six through mid-level career. “The workshops provide hands-on educational experience on topics of energy utilization, production, and conservation, with specific focus on building applications familiar from everyday life experiences.”¹⁸ This program also gives participants role model contacts and engineering career information.

Rocky Flats Environmental Technology Site official environmental justice policy concentrates on eliminating environmental racism and environmental inequality. RFETS uses their NEPA policy as the vehicle for implementation of environmental justice as prescribed by Executive Order 12898 and Council of Environmental Quality. This current process inhibits environmental justice from being achieved because the process focuses on characterizing the study area’s demographics, rather than providing necessary tools for public participation before the NEPA process begins, during the NEPA process and after the NEPA process has ended. Although RFETS has a freeze on hiring new personal and the budget allows for only the basic operational necessities, RFETS has still been able to increase the capacity level of several different minority and low-income populations. This has been achieved without special funding allocated for an environmental justice program or capacity building. RFETS is able to accomplish and carry out this initiative because of the administrators’ creativity and dedication to move beyond the limitation of distributive justice.

CONCLUSION

Environmental justice has been on the policy books for over five years, yet the current implementation guidelines have only a surface level of justice. The environmental justice movement has focused on identifying victimized communities and developing an acceptable remediation process. Current environmental justice policies and procedures have set federal departments and agencies in a reactive mode by only using NEPA as a vehicle for implementation of environmental justice. Public participation is brought in after a proposed action is moving forward which then leaves the impacted community trying to catch up.

Environmental justice is a community-oriented policy that attempts to level the playing field between governments (federal, tribal, state, county and city) and the community. The

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environmental justice movement has forced the federal agencies and departments to develop public participation models to insure the minority and low-income populations are included, but did not provide the necessary tools to assure full participation.

Capacity building allows federal agencies and departments to implement a progressive environmental justice approach. Rocky Flats Environmental Technology Site demonstrates how a federal agency can include capacity building into their environmental justice efforts without extra monies from headquarters and without disrupting their budget.

It is important to emphasize to federal departments and agencies that environmental justice is a philosophy and not a program. Governments can accomplish capacity building for minority, low-income communities and Tribes without increasing their budget or developing a complex "environmental justice program." This is accomplished when every administrator incorporates the capacity building environmental justice philosophy into his/her everyday actions. For example, administrators can add an environmental justice capacity-building objective to all requests for proposals. When an agency asks for this objective, grantees will incorporate environmental justice capacity building into their projects. The department or agency has now taken a proactive approach to environmental justice without incurring any extra costs.

The environmental justice movement has come a long way and has an even longer route to travel. The road that it will follow and the effectiveness of environmental justice are dependent upon changing the current perceptions of environmental justice. The benefits of capacity building are not always immediately visible or even visible at all. Giving minority, low-income communities and Tribes the tools necessary to control the destiny and future of their resources is the path towards true environmental justice.

FOOTNOTES

¹ Presidential Executive Order 12898, "Federal actions to Address Environmental Justice in Minority and Low-income populations", February 11, 1994.

² Memorandum from the President to the Heads of Departments and Agencies. Comprehensive Presidential Documents No. 279. (Feb 11, 1994).

³ Council on Environmental Quality, "Guidance under the National Environmental Policy Act." December 1997, pg 8-9.

⁴ *Bean v. Southwestern Waste Management*, 482 F. Supp. 673 (S.D. Tex. 1979).

⁵ *Environmental Justice Guidance Under the National Environmental Policy*. Council on Environmental Quality. December 1997.

⁶ Final Report of the Federal Facilities Environmental Restoration Dialogue Committee: Consensus Principles And Recommendations For Improving Federal Facilities Cleanup. April 1996, pg. 97.

⁷ SPD Draft EIS, DOE/EIS-0283-DS, pg 1

⁸ Supplement to SPD Draft EIS, DOE/EIS, Appendix M.3

⁹ Supplement to SPD Draft EIS, DOE/EIS, Appendix M.6.

¹⁰ Accelerating Cleanup: Path to Closure Rocky Flats Environmental Technology Site. June 1998, pg 4-1.

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¹¹ RFETS mission statement

¹² Guidance for Implementing Environmental Justice within NEPA Compliance Activities at the Rocky Flats Environmental Technology Site. 1994, page 1 (draft copy on file with the Institute).

¹³ Rocky Flats Environmental Technology Sites Implementation and Success under Environmental Justice, Executive Order 12898. 1995 pg 1-2 (on file with Institute).

¹⁴ Department of Energy Environmental justice Strategy, April 1995, Goals 1-5.

¹⁵ Rocky Flats Environmental Technology Site Draft Site-Wide Environmental Impact Statement. July 1996, pg 5-112 (on file with Institute).

¹⁶ Rocky Flats Environmental Technology Site Science Education Part IV. Office of Civil Rights and Diversity, 1998, pg. 2.

¹⁷ Rocky Flats Environmental Technology Site Science Education Part IV Narrative. Office of Civil Rights and Diversity, 1998, pg. 5.

¹⁸ Rocky Flats Environmental Technology Site Science Education Part IV Narrative. Office of Civil Rights and Diversity, 1998, pg 6.