A TEN-YEAR RETROSPECTIVE ON ENVIRONMENTAL JUSTICE: WHAT HAVE WE LEARNED?

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ABSTRACT

Beginning in 1994, Executive Order 12898 has directed federal executive agencies to identify and address, as appropriate, disproportionately high and adverse health or environmental effects of their programs, policies, and activities on minority and low-income populations. The policy behind the Executive Order was to prevent minority and low-income groups from bearing disproportionate adverse environmental consequences of federal actions. During the last ten years, federal agencies have implemented Executive Order 12898, and some also have developed explicit procedures or guidance for the steps that need to be taken during the preparation of environmental impact statements. Based on the authors' experience, the paper examines how environmental justice practice has evolved in the ten years since the original Executive Order was issued.

This evolution has been both procedural and substantive. The paper examines how the actual practice of environmental justice analysis has progressed in federal agencies that deal with waste management issues. Reference is made to changes in case law and agency practice. The 2000 Census of Population and the ongoing development of geographic information systems in particular have made it easier to identify minority and low-income populations at risk. At the same time, a number of stakeholder groups have taken positions over specific federal actions that have given rise to novel issues and challenges for analysts. The paper discusses how NEPA practice is evolving to deal with these issues and challenges.

INTRODUCTION

Since 1994, Executive Order 12898 has directed federal executive agencies to identify and address, as appropriate, disproportionately high and adverse health or environmental effects of their programs, policies, and activities on minority and low-income populations. The policy behind the Executive Order was to prevent minority and low-income groups from bearing disproportionate adverse environmental consequences of federal actions (1). The Council on Environmental Quality (CEQ) has oversight responsibility for documentation prepared in compliance with the National Environmental Policy Act (NEPA). CEQ provided *Guidance for Addressing Environmental Justice Under the National Environmental Policy Act* (December 1997) (2). As directed, or on their own, federal agencies adopted internal guidance of their own concerning how they would implement Executive Order 12898, and some also have developed explicit procedures or guidance for the steps that need to be taken during the preparation of an environmental impact statement (EIS).

The term “environmental justice” arises out of a series of studies and articles in the 1970s through mid-1990s that observed the disproportionate siting of “locally undesirable land uses” or “LULUs” in poor and minority neighborhoods, in some cases resulting in disproportionately adverse health or socioeconomic effects in these neighborhoods (e.g., (3), (4)). The activist aspect of the environmental justice movement was launched in 1982, when the predominantly low income and minority citizens in Warren County North Carolina began a series of protests against a landfill for PCB-contaminated soils. Opponents believed that the decision to site the landfill in Warren County was an extension of institutional racism they had been experiencing in housing, education, employment, municipal services, and law enforcement for years. The term "environmental racism" was coined to describe this phenomenon. The landfill eventually was constructed, but the national environmental justice movement began (5).

Particularly influential was a study published on the day before Earth Day 1987 by the United Church of Christ’s Commission for Racial Justice, Toxic Wastes and Race, which confirmed that undesirable facilities tended to be sited in low income and minority neighborhoods (6). The movement discussed siting of environmental risks, the promulgation and enforcement of environmental laws and regulations, and the clean-up of polluted areas and sought greater environmental protection for minorities and the poor. The term “environmental justice” is often credited to 1991 document, “Principles of Environmental Justice” (7), written at the First National People of Color Environmental Leadership in October 1991, a key meeting that brought the issue of inequitable enforcement of environmental law to wider attention in the federal government. The courts were active in a number of cases that tested the theory of environmental justice on grounds of violations of Title VI of the Civil Rights Act, which provides that no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance (Section 601). In particular, much of the case law involved application of Section 602, which was broadly construed to include not just the results of overt discrimination but also the (perhaps unintentionally) discriminatory adverse environmental effects of actions undertaken for other reasons (8). Several attempts were also made to change U.S. law to reduce the problem of environmental injustice. For example, the “Environmental Justice Act of 1992” (S. 2806, 102d Cong., 2d Session) was proposed to “ensure that the significant adverse health impacts that may be associated with environmental pollution in the United States are not distributed inequitably.” One of the threads of the movement that was not subsequently addressed was the notion that economic justice and environmental justice needed to be addressed simultaneously. According to that view, addressing economic justice and environmental justice together would prevent a false choice for poor and minority communities between "no jobs and no development" on the one hand versus "low paying, risky jobs and pollution” on the other.

Gradually, environmental justice started to become embodied in practice if not in law. For example, in 1993, a federal advisory committee called the National Environmental Justice Advisory Council was established to provide independent recommendations to the Administrator of the Environmental Protection Agency (EPA) on environmental justice issues.

The response of the federal government to this constellation of concerns became much more focused in February 1994, when President Clinton signed Executive Order 12898, “Federal

Actions to Address Environmental Justice in Minority Populations and Low income Populations,” 59 FR 7629 (1994). The Executive Order directs federal agencies in the Executive Branch to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities” on minority and low income populations (1). The Executive Branch agencies also were directed to develop plans for carrying out the order. Additional guidance was provided later by the CEQ for integrating environmental justice into the NEPA process in a December 1997 document, *Environmental Justice Guidance under the National Environmental Policy Act* (2). It is important to note that unlike Title VI of the Civil Rights Act, the Executive Order provides no legal rights and is not enforceable in court. It is a directive to Executive Branch agencies designed to improve the equity of their performance.

AGENCY GUIDANCE

There are fifteen executive federal agencies and numerous other independent federal agencies, including the EPA and Nuclear Regulatory Commission (NRC), that have policies and guidance in place to comply with Executive Order 12898. Each agency provides directives and rules specific to the agency’s mission regarding the implementation of Environmental Justice. The agency-specific policies largely follow general guidance and directives provided by NEPA, including definitions of terms and policy statements. Agency-specific guidance integrates the spirit of the Executive Order 12898 into the decision-making process and EISs.

The Federal Interagency Working Group on Environmental Justice (IWG), was established in 1994 to help facilitate implementation of Executive Order 12898. The IWG comprises eleven federal agencies and several White House offices and is under the leadership of EPA. The IWG has three active task forces that focus on (1) Health Disparities, (2) Revitalization Demonstration Projects, and (3) Native Americans.
The agencies that are most likely to deal with justice matters as they pertain to the disposal of large amounts of waste include the following:

Department of Energy (DOE) – Regulates all radioactive waste sites and legacy waste from the Atomic Energy Commission and successor agencies, including the Savannah River Site and Hanford.

- DOE developed environmental justice guidelines in 1994 and has incorporated environmental justice into all updated permitting guidelines for the disposal of environmental and mixed waste. DOE is an active member of IWG.

Environmental Protection Agency (EPA) – Regulatory oversight of solid waste and toxic substances

- EPA has developed an Environmental Justice Action Plan and regularly requires process reports from each of the primary programs. EPA has put in place a grants program and a community intern program directly focusing on environmental justice matters. EPA is an active member of the IWG and also has oversight of this interagency working group.

Department of Defense (DOD) – Weapon production waste and storage oversight.

- DOD now incorporates environmental justice into all EISs produced by the agency and provides references to NEPA guidelines for all branches of the military.

Department of the Interior (DOI) – Includes the Bureau of Indian Affairs, Fish and Wildlife, and Bureau of Land Management. DOI has oversight of surface mining and mineral extraction.

- In 1995, DOI incorporated environmental justice goals into its agency's strategic plan and included specific language for each of the bureaus and offices within DOI.

Although not a member of the IWG, NRC regulates nuclear materials and facilities to protect public health and the environment.

Although the overall environmental justice policy guidance at each agency has largely remained the same during the past ten years, agencies now have a great deal more experiences with such matters. These experiences are shared and made available through the IWG. Websites documenting lessons learned, environmental justice reports and activities, agency contacts, and demonstration projects are available to the public.[b] We now turn to practice in two agencies—DOE and NRC.

DOE PRACTICE

One key aspect of DOE's policy is a greater commitment over the last ten years to involve low income and minority communities in dialog and address their concerns in the process of cleaning up the federal weapons complex legacy wastes, including helping to build local capacity to monitor DOE cleanup activities, and to understand and comment effectively on DOE actions (9,10). In addition, in implementing National Environmental Policy Act requirements, DOE EISs began to include sections on environmental justice and the potential for disproportionate impacts on low income and minority individuals. This was occurring even before environmental justice guidance was available, (for example at Savannah River in 1995) (11).

These early 1990s EISs highlighted many of the environmental justice issues that have remained issues in later EISs, including transportation routes that go through low income and minority neighborhoods, concerns about accidents and adequacy of emergency response capabilities, allegations of racial and other socioeconomic biases in the siting process, and potential impacts on cultural sites (12). The Tank Waste Remediation System (TWRS) EIS estimated the adverse impacts of increases in housing prices on affordability of housing for minority and low income communities and discussed the constraint that the project facilities would pose for Tribal access to the ancestral lands and religious sites at Hanford (13), issues that would later come up in the NRC EIS for an independent spent fuel storage facility at Skull Valley, Utah (14). On the other hand, some of these early EISs dealt with issues that have not been of much concern in many later environmental justice analyses. For example, the TWRS EIS included potential differential access to jobs from the TWRS project.

Some of DOE’s EISs have dealt directly with lifestyle and subsistence issues. For example, in 1999 the Hanford Comprehensive Land Use Plan EIS explicitly considered the differential diet vulnerability of Native Americans leading a traditional lifestyle, who reportedly eat a diet high in locally-caught fish (15). At Savannah River in 2001, an EIS directly addressed and decided that an issue of contamination of fish relied on for subsistence purposes was not an issue (16). At Savannah River in 2000, the EIS for spent fuel management explicitly estimated the impacts of radiological releases from the site on minority and low-income populations within 80 km by distance and direction for airborne releases, but no disproportionate impacts were found (17). Native American subsistence activities and spiritual and cultural concerns, including access to ancestral lands and cultural sites, were disclosed and treated extensively by the Yucca Mountain EIS (18), based in part on dialog with the affected tribes and documents authored by them (19). The Yucca Mountain EIS also treated environmental justice health concerns as they relate to transportation routes.

In general, DOE appears not to have been prescriptive on how minority and low-income populations are to be identified or exactly what impacts should be examined, but this has not been a constraint on getting the EISs accepted. At the Waste Isolation Pilot Plant in New Mexico in 1997, no explicit percentage cutoff for minority population identification was used (12), and this practice has continued at most DOE sites. Particularly after geo-referenced demographic and economic data from the 2000 Census of Population became available, some analyses have identified individual minority groups as a percentage of the total population in very fine geographic detail (Census tract, block group, or even block) using geographic information systems (GIS). Recently, the Hanford site analyses have generally used a detailed GIS process at each Census block or block group within 80 km of the site. A minority or low income population was indicated in the small geographic area if the minority or low income percentage reached 50% of the population or, alternatively, if the percentage was 20 percentage points above the state-wide average concentration of minority or low income persons (20). This is similar to the method used by NRC. At Los Alamos in 1999, compass directional segments were used and the fixed standard was 25% of the population or more to designate a minority or low-income population (21). At Savannah River, distance and direction are used, but no explicit cutoff is used. Instead, census tracts are classified according to where they are less than 35% minority, 35-50%, and more than 50% minority (16). At Yucca Mountain, DOE adopted an early version of NRC’s guidance for identifying minority and low-income populations. As a consistent criterion for identifying minority and low-income blocks and block groups, DOE employed a 10-percent threshold, meaning that the environmental analysis focused on blocks and block groups in Nevada having a 10-percent or greater minority population or low-income population than the state averages (18).

In addition, DOE began incorporating environmental justice guidance in activities under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or “Superfund”) in 1998 (22). DOE proceeded on the theory that even though the Executive Order mentioned only NEPA, to the extent practical DOE also integrates NEPA values into its CERCLA response processes—including analysis of cumulative, off-site, ecological, and socioeconomic impacts. In the CERCLA process, environmental justice comes into play in three places. Environmental justice is analyzed in the preliminary assessment, where low income and minority communities may be concerned that no effects on them ever have been found because

some waste sites in their communities have been overlooked. It is evaluated at the Remedial Investigation / Feasibility Study stage, where different impact pathways may exist for minority and low income populations due to different practices, customs, locations, or diets. Finally, it appears in community relations, where there may be barriers of language, culture, or access to information. The guidance urges strong planning and outreach at every stage of the process.

NRC PRACTICE

Although an independent agency, the NRC has complied with the Executive Order most recently affirmed compliance in its “Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions” (23). In that policy statement, the NRC reaffirms that the Commission is committed to full compliance with the requirements of NEPA. This is important because the NRC believes that an analysis of impacts needs to be done as part of the agency’s NEPA obligations to accurately identify and disclose all significant environmental impacts associated with a proposed action. Thus, while the NRC is committed to the general goals of EO 12898, it strives to meet those goals through its normal and traditional NEPA review process (23).

The purpose of the recently published policy statement is to present a comprehensive statement on the NRC’s policy on the treatment of environmental justice matters in NRC regulatory and licensing actions. The draft policy statement (68 FR 62642) received a number of comments before it went final. In response to these comments, NRC clarified its guidance regarding the implementation of environmental justice.

The new policy statement does not change how the agency implements or interprets NEPA, except to clarify certain procedures that correctly identify and adequately weigh significant adverse environmental impact on low income and minority populations. Environmental justice is considered to be a normal part—but not an expansive part—of the NEPA process at the NRC. NEPA, not the Executive Order, obligates the NRC to consider environmental justice related issues. Environmental justice issues are only considered to the extent required by NEPA. It is the disparate impact analysis within the NEPA context that is the tool for addressing environmental justice issues. It is the Commission’s goal to identify and adequately weigh or mitigate effects on low income and minority communities by assessing impacts peculiar to those communities. And environmental justice is not, per se, a litigable issue in the EIS context. The policy statement does set forth the criteria for admissible contentions in the environmental justice arena within the context of NEPA.

The Commission recognizes that racial discrimination is a “persistent and enduring problem” in American society, but environmental justice is not a general remedial tool. As affirmed in the recently released policy statement, environmental justice issues are only considered when and to the extent required by NEPA. NEPA is an environmental statute and a broad-ranging inquiry into allegations of racial discrimination goes beyond the scope of NEPA’s mandate to “adequately identify and weigh significant adverse impacts.” In addition, racial motivation and fairness or equity issues are not recognized under NEPA, though discussed in the original Executive Order. Their consideration would be contrary to NEPA and the Executive Order’s limiting language that “no new rights” are created.

Environmental assessments (EAs) normally do not include environmental justice analysis. If there is no significant impact because of the proposed action, then an environmental justice review is not necessary. In most EAs there are little or no offsite impacts and, consequently, impacts would not occur for people outside the facility. However, there could be special circumstances where there is clear potential for offsite impacts from the proposed action, in which case an environmental justice review might be appropriate.

Generic and programmatic impact statements do not include environmental justice analysis. An NRC environmental justice analysis is limited to impacts associated with a proposed action; i.e., the communities near the proposed action. Consequently, environmental justice, as well as other socioeconomic issues, is considered in site-specific EISs.

While there is need for flexibility in NRC’s environmental justice analysis to reflect the unique (i.e., site specific) nature of each review, each review is defined by a set of procedural guidance criteria for identifying minority and low-income communities and assessing impacts they may experience. These are briefly addressed as follows. Although the details of the methods vary, the same basic procedures are similar in other agencies.

Defining the Geographic Area for the Assessment

One of the first things undertaken in an environmental justice review is to define the geographic area in which the assessment takes place. The Office of Nuclear Reactor Regulation (NRR) traditionally has used an 80-km (50-mi) radius for re-licensing and other regulatory purposes, while because of the much lower energy in most nuclear materials applications, the Office of Nuclear Materials Safety and Safeguards uses a much smaller area (23). This distance is a guideline. The geographic scale should be commensurate with the potential impact area. For purposes of NEPA, the numerical distance (80-km) is likely to characterize the likely extent of impacts for categories of regulatory action.

Identify Low income and Minority Communities

Once the impacted area is delineated, the next step is to identify potentially impacted minority and low-income populations. Under current NRC guidance employed in the re-licensing and regulatory arena, low income and minority populations are initially identified by comparing the minority or low income population in the impacted area to the percentage of minority or low income populations in the county (or parish) or the state, as appropriate, using GIS analysis of the 2000 Census at the Census block group level. If the percentage in the impacted area significantly exceeds that of the state or county for either the minority or low-income populations, then environmental justice is considered in more detail. NRC guidance defines significance to be 20 percentage points, although again this is just a guideline that can be modified if circumstances warrant. Alternatively, if either the minority or low-income population percentage in the impacted area exceeds 50 percent, environmental justice matters are also considered in more detail.

Scoping and On-Site Review

The staff’s analysis of environmental justice issues is supplemented by information that comes out of the scoping process and the on-site review, prior to preceding with the preparation of the draft EIS. This is in addition to reviewing available demographic data. Public participation in the scoping process and the probing by staff analysis of governmental officials and social services workers by NRC staff, during the on-site review data gathering process, ensures that potentially impacted low income and minority populations are not overlooked in assessing the potential impacts unique to those communities.

Analysis

The staff then reviews pathways through which the environmental impacts associated with the proposed action could affect minority and low-income populations, and whether they are affected disproportionately by these impacts. In this analysis, the staff focuses in on unusual resource dependency or practices, such as subsistence agriculture, hunting or fishing, through which the populations could be disproportionately impacted. In addition, staff will ascertain whether there are any location-dependent disproportionate impacts that could affect low income and minority populations. The staff then makes a finding whether low income and minority populations are disproportionately affected by these environmental effects vis-à-vis other human

populations in the potentially impacted area. If so, than a finding for environmental justice impacts is made and mitigation actions may be warranted.

SOME KEY CASES AND CHALLENGES

A number of cases and situations have appeared in which certain aspects of environmental justice concerns are being interpreted in particular ways. Challenges to federal actions are somewhat limited under NEPA, so it is worth understanding what elements of impacts are considered within the scope of environmental justice and what impacts are not. This is a constantly evolving area. Some of the key issues have included. 1) Is there a right to a private enforcement remedy via lawsuit to force public agencies to consider environmental justice? 2) What are the requirements for facility siting to avoid an environmental justice issue? 3) What kind of an effort must be made to identify minority and low-income groups? 4) Are socioeconomic impacts part of the environmental impacts that are topics for environmental justice analysis?
5) To what extent must the government allow for disparate impacts within minority and low-income groups? 6) To what degree (if any) does failure of a state or local government to provide resources for emergency planning and other services impose a constraint on federal action as it applies to environmental justice?

Camden Citizens in Action v. New Jersey Department of Environmental Protection: No Right to Private Enforcement Under Title VI of the Civil Rights Act

It was assumed for many years that although the Executive Order requiring agencies to address environmental justice and prevent minority and low income groups from bearing disproportionate adverse environmental consequences of federal actions created no legal rights, it was still possible to sue federal agencies under section 602 of the Civil Rights Act over (perhaps unintentional) discriminatory environmental impacts that were a result of some federal action such as granting a permit. It would still be possible to sue for deliberate discrimination under Section 601 of the Civil Rights Act, but it is much more difficult to meet burden of proof that the discrimination was deliberate. U.S. Supreme Court had previously held in *Alexander v. Sandoval*, 121 S. Ct. 1511, 2001 WL 408983 (Apr. 24, 2001) in a case from Alabama over the results of drivers licensing regulations that there was no private right of action implied from Title VI to enforce the disparate impact regulations. The earlier case brought into question whether minorities and low income groups had a judicial path through which to oppose administrative decisions approving the siting of noxious facilities in their backyards, for example. In a rather lengthy opinion, the *Camden* case, the federal Third Circuit Court of Appeals held that the regulations under Title VI of the Civil Rights Act that prohibit use of criteria and methods of administration that have a disparate impact based on race, color or national origin may not be enforced in a private lawsuit under 42 U.S.C. § 1983, because the law that authorizes regulations to prevent discrimination only creates a right to be free from *intentional* discrimination. This enforcement possibility was left open by Justice Stevens' dissent in *Alexander v. Sandoval.* By refusing to accept an appeal from the Third Circuit of this decision, the Supreme Court has let the decision stand. Other legal avenues are still being pursued by various parties seeking to revive private enforcement.

Louisiana Energy Services: Reasonable Siting Process, Environmental Justice Not Another Term for Racial Discrimination, Must Make Real Effort to Identify Low income and Minority Populations, Disparate Socioeconomic Impacts in Scope.

In the Louisiana Energy Services (LES) Claiborne Parish case (24) it was alleged by the opponents of the facility that the selected site was a result of racial motives. However, the Commission believed that

> **….**the site screening process is used by a license applicant to identify sites that may meet the stated goals of the proposed action. It is not uncommon for only one of many possible sites to be deemed reasonable… implementing guidance provides that an EIS must "[r]igorously explore ... all reasonable alternatives." 40 C.F.R. §1502.14(a). For those alternatives which have been eliminated from detailed study, the EIS is required merely to "briefly discuss" why they were ruled out. Where (as here) "…a federal agency is not the sponsor of a project, the federal government's consideration of alternatives may accord substantial weight to the preferences of the applicant and/or sponsor in the siting and design of the project".

It appears that as long as the process used in site selection is unbiased and conducted according to criteria that are relevant to the functioning of the facility, the NEPA analyst may concentrate the environmental justice analysis on what the impacts of the facility actually would be, rather than second-guess the process that selected the site.

The Commission did agree that the applicant had failed to identify one critical local socioeconomic consequence of the proposed facility, closure of a road depended upon by low income and minority individuals in two small communities near the LES site, which emphasizes the need to understand all of the probable impacts of the proposed facility as these may disparately affect low income and minority individuals.

Since these socioeconomic impacts were related to environmental aspects of the LES (i.e., physical closure of the road), they were clearly in scope for NEPA analysis.

Private Fuel Storage: Federal Government Need Not Get Into Disputes Within Minority Groups

NRC rejected a motion premised on environmental justice regarding payment of money to the Skull Valley Band of Goshute Indians. The Tribe received money from Private Fuel Storage (PFS) as lease payments for storing radioactive material. The opponents, who are members of the Skull Valley Band, asserted that the tribal Chairman was not dividing the funds fairly. The NRC said this was not an environmental justice issue as it pertained to money, not the environment. Additionally, the NRC said the challenge was not part of its NEPA review, describing the complaint as a request for "a corruption investigation." Even if the charges proved to be true, they were certainly not an environmental impact. "NEPA, however, does not require the NRC to investigate or enforce whether the Band leadership in fact fulfills its promises -- whether PFS payments indeed are spent prudently, legally, or otherwise to the satisfaction of the entire tribe." The NRC refused to reopen the case record based on the motion (25).

Grand Gulf Early Site Permit: What is A Valid Environmental Justice Issue?

A group of organizations collectively known as the Grand Gulf Petitioners attempted to intervene before the Atomic Safety and Licensing Board (ASLB) in a proceeding to challenge the application of System Energy Resources, Inc., (SERI) for a 10 C.F.R. Part 52 early site permit, based on several environmental justice grounds. 1) The applicant's environmental report (ER) failed to address the environmental impacts of the proposed reactor(s) in light of factors peculiar to the minority and low income community; e.g., its close proximity to the proposed reactor(s) meant that the minority and low income community bears the highest risk of injury and illness as a result of severe accidents at the proposed facility. 2) The Claiborne County, Mississippi government is particularly unprepared to respond to a radiological emergency or a security threat at the proposed reactor(s), as a result of the high level of poverty in the county and the effects of a discriminatory tax policy that sends most of the tax revenue from Grand Gulf out of Claiborne County. 3) There would be an adverse effect from adding two reactors to the Grand Gulf site on property values and the overall economic health of Claiborne County from adding two reactors to the Grand Gulf site. 4) By concentrating three nuclear power plants on one site, SERI proposed to create a nuclear sacrifice zone in Claiborne County. 5) There was no analysis of the disparity in distribution of the economic benefits yielded by the proposed reactors (tax revenues mainly go to the state of Mississippi and most of the jobs generated by the new reactor(s) will go to people who live outside Claiborne County). 6) The ER failed to weigh the costs of the proposed reactor(s) to the minority and low income community against the benefits to the community, or to examine alternatives that would lessen the impact of the facility and/or distribute the costs and benefits more equitably (26).

The ALSB denied the petition, stating that Grand Gulf Petitioners failed to demonstrate any valid contention. 1) Although close proximity of low income and minority populations was demonstrated, the petitioners showed no evidence of a disproportionate environmental impact. 2) the adequacy or inadequacy of the emergency response plan were beyond the scope of the hearing and belied by correspondence with emergency management officials. Though not directly said, the law does not usually consider a failure to receive a benefit as a "loss" unless one is clearly entitled to the benefit. So while Claiborne County might hope or expect to obtain an economic benefit from the plant, it is not entitled to these. As the Commission observed in the PFS case, "…the executive order [12898], and NEPA generally, do not call for an investigation into disparate economic benefits as a matter of environmental justice. Even though money (or social services) from the PFS lease payments might make it easier for some to tolerate noise, cultural insult, and unsightliness near the facility, the payments don't 'mitigate' environmental harms in the sense of eliminating or minimizing them. We see nothing in the executive order or in NEPA to suggest that a failure to receive an economic benefit should be considered tantamount to a disproportionate environmental impact" (27).

CONCLUSIONS

After ten years of experience, we note that identification and analysis of environmental justice, outreach to minority and low income communities, and inclusion of environmental justice analysis has become a routine part of environmental analysis and characterization of impacts in

EISs. As currently interpreted, Executive Order 12988 requires that low income and minority communities be identified in considerable geographic detail where possible and relevant. While Bureau of the Census GIS mapping is relevant and helpful in doing this, the agency and the analyst should ordinarily take extra trouble for additional community outreach to insure that no relevant group is overlooked. This can take the form of extra inquiries to social service agencies, community leaders, and postings of written material (in English or other languages as needed) in locations where minority and low-income people congregate such as churches and community centers. If well planned, this outreach can be part of the normal EIS scoping process. Failure to go this extra mile has sometimes caused problems in having analyses accepted, while taking the extra trouble usually has been beneficial to the federal agency.

It has also become clear in the course of ten years that, perhaps to the disappointment of some of its early and passionate advocates, environmental justice as recognized by the federal government is not a general tool to rewrite all past environmental wrongs where low income and minority persons have been the primary individuals affected. While the government is willing to go some distance in evaluating disparate adverse environmental impact on low income and minority persons under NEPA, to protect low income and minority persons from overt discrimination, and to enforce environmental regulations in a non-discriminatory manner, it appears not to be willing to, for example, reverse siting decisions for potentially noxious facilities if those decisions were reached on valid operational grounds (as opposed to clearly discriminatory ones) and if the owners and operators otherwise obey the law. Environmental justice is a limited environmental tool, not a tool to correct social or economic injustice.

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[b] See http://www.epa.gov/compliance/environmentaljustice/interagency/ for more website information