Overview of the environmental justice movement from legal perspective in our modern democratic society

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Synopsis

Justice is a contested concept. The concept of Environmental Justice includes fair treatments of all races, cultures, incomes and education levels with respect to the enactment, implementation, and enforcement of environmental laws, regulations and policies.

However, studies show that in U.S. poor and minority people are more likely than their white counterparts to live near freeways, municipal and hazardous waste landfills, incinerators, and other noxious facilities. Moreover, according to the past experience, all of those legal tools have their own limitation and have also been relatively unsuccessful to protect the poor and minority.

On the situation of lacking economic and political strength, how do they substantively participate in the process of democracy? How do we increase the strength of economics and politics for the poor or minority people to address the trade-off? What should we do to improve environmental injustice in today's complex society?

This paper proposes some guidelines from legal perspective to restore the environmental justice in our modern democratic society.

1. Introduction

Justice is a contested, and also complicated, concept. Some academics assert, as does libertarian *Robert Nozick*, for example, that justice requires absolute respect for property right, even if this produces in great inequality between rich and poor.[1] Others, such as the liberal contractarian *John Rawls*, think, to the contrary, that justice requires maximum equality compatible with individual incentives (or interests) needed to promote economic growth.[2]

According to *Ronald Dworkin*, that what Justice is, which might be a less uncontroversial claim, is to restate the principle of equal consideration of interests, which all human beings are of equal moral considerability. Hence, unequal treatment of human

[1] Like the era of *Lochner*, Justices in Supreme Court supported this view and prohibited the government getting involved too much on the free market, even though their economic strength of the poor, like worker, and the rich, like owner of bakery, were totally unequal, and the contract they made might harm the workers. *See*, *Lochner v. New York*, 198 U.S. 45 (1905).

[2] Peter Wenz, *Does Environmentalism Promote Injustice for the Poor*, in ENVIRONMENTAL JUSTICE AND ENVIRONMENTALISM, THE SOCIAL JUSTICE CHALLENGE TO THE ENVIRONMENTAL MOVEMENT 57 (Ronald Sandler and Phaedra C. Pezzyllo ed., 2007). Still others, including the communitarian *Amitai Etzioni*, think that justice rests on community solidarity or traditional moral values. *Id*, at 58.

beings must therefore be justified, and such justification requires recourse to moral consideration or other values.[3]

Further, when the social justice got involved the environmental affairs, there is so-called Environmental Justice emerged. The concept of Environmental Justice includes fair treatments of all races, cultures, incomes and education levels with respect to the enactment, implementation, and enforcement of environmental laws, regulations and policies.[4] Robert Bullard had identified five basic elements of the environmental justice framework in 90s: (1) a right of all individuals to be protected from pollution; (2) a preference for prevention strategies; (3) a shift to polluters and dischargers of the burdens of proof; (4) a definition of discrimination that includes disparate impacts and statistical evidence; and (5) an emphasis on targeted action to redress unequal risk burdens.[5]

However, studies show that poor and minority people are more likely than their white counterparts to live near freeways, sewer treatment plants, municipal and hazardous waste landfills, incinerators, and other noxious facilities. The environmental justice movement claims that such disproportion is due to racism and classism in the siting of locally undesirable land uses (LULUs) (even including taking property from the poor or minority people to private business or developer[6]), in the enforcement of environmental laws and regulations, and in the remediation of hazardous sites.[7]

The disproportionate location of exposure to toxic pollution in poor minority communities is the result of various development patterns.[8] From the aspect of industry, a

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[3] *Id*.

[4] Robert R. Kuehn, *The Environmental Justice Implications of Quantitative Risk Assessment*, 1996 U. ILL. L. REV. 103, at 106 (1996). He furthers that the fair treatment implies that no subgroup of people should be forced to shoulder a disproportionate share of the negative environmental impacts of pollution or environmental hazards due to a lack of political or economic strength. *Id*.

[5] Robert D. Bullard, INTRODUCTION TO UNEQUAL PROTECTION: ENVIRONMENTAL JUSTICE AND COMMUNITIES OF COLOR, at 3, 10 (Robert D. Bullard ed., 1994).

[6] Catherine E. Beideman, Note, *Eminent Domain and Environmental Justice: A New Standard of Review in Discrimination Cases*, 34 B.C. ENVTL. AFF.L. REV. 273 (2007).

[7] *See*, John S. Applegate, THE REGULATION OF TOXIC SUBSTANCES AND HAZARDOUS WASTES, at 1100 (Johan S. Applegate ed., 2000).

[8] **First**, the communities where the poor live were originally the homes of whites who worked in the facilities that generate toxic emissions. After whites vacated the housing for better shelter as their socioeconomic status improved, the poor minority who enjoyed much less residential mobility took their place. **Second**, housing for African-Americans and Latinos was built in the vicinity of existing industrial operations because the land was cheap and the people were poor. **Third**, sources of toxic pollution were placed in existing minority communities. **Fourth**, the siting of new facilities, including hazardous industries, brings the promise of economic prosperity and tax revenues. Therefore, it forces communities which often have high unemployment to choose between economic security and environmental degradation. However, those benefits anticipated from these facilities often do not materialize for the following reasons. The hazardous waste facilities only provide few jobs for area residents, and the jobs that are created usually require technical education and are often brought in from outside the community. Also, the increased tax revenues do not go to social services or other community development projects, but toward expanding the

company wishing to locate a hazardous waste facility may unconsciously follow a path of least resistance. This approach would target land of relatively low value and minimal zoning restrictions without considering the composition of the local community. On the other side, the poor or the minority people tend to live in areas of lower land values and mixed industrial/residential uses and, as a result, are disproportionately affected by decisions relating to siting hazardous facilities.[9] Hence, there is a trade-offs existing between economic security and environmental degradation. The poor and minority people would like to get job rather than a better environment.[10]

In the very beginning, the environmental movement and advocates for civil rights and social justice were separated. Along with its development, in presenting these challenges, communities have relied upon a number of legal tools, including claims under ***the Equal Protection Clause of the Fourteenth Amendment***, ***Title VI of the Civil Rights Act of 1964***, ***Section 1983 of the Civil Rights Act of 1871***, ***environmental statutes***, and ***common law tort claims***. In addition, the government has issued the Executive Order No. 12,898 and EPA's interim guidance intended to bring agencies into promoting environmental justice.

However, all of these legal tools have their own limitation and have also been relatively unsuccessful. And, the critic issues are all concerned about the political and economic incapacitation of the poor and minority people.

In any event, the starting point is that the government has its obligations to protect the environment, and safety/health of the public. In our modern democratic society, to achieve its goal, the government action, especially administrative agency decision, at least has to meet the requirements of the due process, which include procedural and substantive ones, and are emphasized not only in administrative law but also in constitutional context.

All procedural protections are to check the government action. The fundamental values of procedure include: **transparency**, **accountability**, and **participation**.[11] According to Paul Craig, the pluralist conception of "democracy" places stress upon process considerations.[12] It also fosters interest representation with the object of ensuring that those affected groups by agency decision will be able to participate in the

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infrastructure to better serve the industry being developed. *Id*, at 1102-03.

[9] *Id*.

[10] Even according the market theory, the willing to pay will cause the same problem because the rich have the ability to afford high price for a better environment.

[11] Alfred C. Aman, Jr., ADMINISTRATIVE LAW AND PROCESS (2006).

[12] Paul Craig, PUBLIC LAW AND DEMOCRACY IN THE UNITED KINGDOM AND THE UNITED STATES OF AMERICAN, 117 (1990).

decision-making process.[13]

However, for those poor and minority communities, on the situation of lacking economic and political strength, how do they substantively participate in the process of democracy? How do we increase the strength of economics and politics for the poor or minority people to address the trade-off? What should we do to improve environmental injustice in today's complex society? According to the development of this movement, although there are many legal tools people can use to assert their own right, most of them do not work well to protect the poor and color. Is there any positive way to overcome the obstacle and achieve the protection?

Hence, we should start from the correction of decision-making procedure to re-build the basic values of due process and then to put much weight on the concern addressing the social justice, such as shifting the burden of proof to industries and adopting stricter standard of judicial review on economic inequality for promoting the civil rights. Finally, because of the scientific uncertainty and the approach "err on the side of safety", we should establish the fundamental and positive environmental policy of adopting Precautionary principle for the modern environmental protection.

Toady, the common interests of environmentalists and social justice advocates, through the coalition, are advanced by the environmental justice movement.[14] Therefore, when we face the paradoxes of race, law, and inequality in the society of the United States, environmental injustice can be a good example to show what role scholars can play. Along with the development of environmental justice movement, this paper is trying to propose the positive solutions that not only right the wrongs of the pasts, but also achieve the environmental justice.

2. The Environmental Justice Movement

2.1 Background & Development

Definitely, Rachel Carson's book "Silent Spring",[15] published in 1962, marked the start of the modern environmental movement in U.S.[16]

As early as 1971, federal regulators recognized that exposure to environmental pollutants was not distributed equally: minority communities experienced

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[13] Paul Craig furthers that while process rights are a necessary element of administrative law, they are not sufficient, and more substantive judicial control is necessary in order to guard against the danger of overpowering faction. *Id*.

[14] Evan J. Ringquis, *Environmental Justice: Normative Concerns, Empirical Evidence, and Government Action*, 239, at 240 in ENVIRONMENTAL POLICY – NEW DIRECTIONS FOR THE TWENTY-FIRST CENTURY (Norman J. Vig and Michael E. Kraff).

[15] Rachel Carson, SILENT SPRING (1962).

[16] Benjamin Kline, FIRST ALONG THE RIVER – A BRIEF HISTORY OF THE U.S. ENVIRONMENTAL MOVEMENT, at 2 (2007).

disproportionately high levels of environmental risk.[17] And then, concerns over racial and class biases in environmental protection have mobilized hundreds of grassroots groups into what is generally referred to as the Environmental Justice Movement.[18]

The issues of environmental justice first attracted national media attention in 1982 when 500 protestors were arrested after they threw their bodies in front of trucks carrying polychlorinated biphenyl (PCB)-contaminated soil to a landfill in a poor, predominantly black Warren County, North Carolina.[19] Many of the protestors believed this landfill was a violation of residents' civil rights and a threat to the public and environmental quality.[20] While their activists were unsuccessful in stopping the landfill, their actions highlighted the need for cooperation between civil rights advocates and environmentalists.[21]

Since 1990, academicians, civil rights leaders, and environmental groups have worked with grassroots organizations to identify and address inequities in the distribution of environmental hazards.[22] They found that distributional inequities exist in areas beyond the siting of hazardous waste facilities. For example, minority and lower-income children retain the highest risk of elevated lead levels in their blood and incur the highest occupational health risks such as exposure to pesticides, solvents, and metals.[23]

In recent years, the environmental justice movement has begun to organize around

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[17] *See*, U.S. Council on Environmental Quality, *Environmental Quality 1971* (Washington D.C.: U.S. Government Printing Office, 1971).

[18] *See*, Evan J. Ringquist, *supra note* 14, at 239. The call for environment justice surfaced during the late 1970s with the work of grassroots organizations such as Mothers of East Los Angeles. The belief the grassroots groups have is the poor and minorities are systematically discriminated against in the siting, regulation, and remediation of industrial and waste facilities. These groups became an effective voice for concerns of inner-city residents as they aggressively challenged local developments that the community considered undesirable. However, because of lacking detailed empirical research and evidence of discrimination, their influence on policy was limited. *See*, John S. Applegate, *supra note* 7, at 1100.

[19] *See*, Dale Jamieson, *Justice: The Heart of Environmentalism*, in ENVIRONMENTAL JUSTICE AND ENVIRONMENTALISM, THE SOCIAL JUSTICE CHALLENGE TO THE ENVIRONMENTAL MOVEMENT 85, at 88 (Ronald Sandler and Phaedra C. Pezzyllo ed., 2007).

[20] *See*, Evan J. Ringquist, *supra note* 14, at 240-41.

[21] In the movement's earliest stages of development, environmental justice organizations were largely isolated or loosely connected to one another and only concentrated on local issues, because they feared that an alliance might dilute their effectiveness and detract from their ability to attract members. *See*, Evan J. Ringquist, *id* , at 240. Also *see*, Daniel Faber, *A More "Productive" Environmental Justice Politics: Movement Alliances in Massachusetts for Clean Production and Regional Equity*, in ENVIRONMENTAL JUSTICE AND ENVIRONMENTALISM, THE SOCIAL JUSTICE CHALLENGE TO THE ENVIRONMENTAL MOVEMENT 135 (Ronald Sandler and Phaedra C. Pezzyllo ed., 2007). Moreover, some critics think that the environmental movement sometime has been accused of promoting injustice to human beings, especially poor people and people of color. *See*, Peter Wenz, *supra note* 2.

[22] *See*, John S. Applegate, *supra note* 7, at 1101. Partially in response to criticism from environmental justice advocates, partially in reorganization that social justice and the environment are intimately linked, and also because poor and minority citizens provide an opportunity to increase their membership base, mainstream environmental groups have got involved in the environmental justice movement. *See*, Evan J. Ringquist, *supra note* 14, at 240.

[23] Gerald Torres, *Environmental Burdens and Democratic Justice*, 21 FORDHAM URBAN L.J. 431 (1994).

broader issues because of the trend of globalization.[24] In the domestic development, with a number of new organizational entities and the consolidation of the regional and national constituency-based networks, the environmental justice movement is attempting to develop a new infrastructure for building internetwork collaboration and coordinated programmatic initiatives that can take the work beyond the local level to have a broader policy impact at the state, national, and international level.[25]

Following the starting point of the environmental justice movement, there were couples of series of, but independently, reports that presented the environmental inequality in our society.

As early as 1983 (following the Warren County protests), the United States General Accounting Office (GAO) investigating hazardous waste facility siting in EPA Region IV found that a strong relationship between the location of off-site hazardous waste landfills, race, and the socioeconomic status of the surrounding communities in the system.[26]

In addition, the most significant study was conducted by the Commission for Racial Justice, United Church of Christ (UCC) in 1987 (update in 1994). The landmark study, *Toxic Wastes and Race*, found race to be the single most important siting factor-more important than income, home ownership rate, and property value-in the location of toxic waste sites.[27]

The study from Greenpeace concluded that the minority portion of the population in communities with existing incinerators is eighty-nine percent higher than the national average.[28]

After all, EPA conducted itself investigation, *Environmental Equality: Reducing Risk For All Communities*, to assess the merits of those earlier studies.[29]

EPA defined "environmental equity" as being concerned with a variety of issues which fall into three general categories: the distribution and effects of environmental problems, the environmental policy making process, and the administration of environmental

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[24] Dale Jamieson, *supra note* 19.
[25] Daniel Faber, *supra note* 21, at 135.
[26] U.S. GEN. ACCT. OFF., SITING OF HAZARDOUS WASTE LANDFILLS AND THEIR CORRELATION WITH RACIAL AND ECONOMIC STATUS OF SURROUNDING COMMUNITIES, June 1, 1983.
[27] According to the report, non-whites are forty-seven percent more likely than whites to live near a toxic waste site and are three times more likely to live in a community with more than one such site. COMMISSION FOR RACIAL JUSTICE, UNITED CHURCH OF CHRIST, TOXIC WASTE AND RACE IN THE UNITED STATES: A NATIONAL REPORT ON THE RACIAL AND SOCIO-ECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES (1987).
[28] PAT COSTNER & JOE THORNTON, PLAYING WITH FIRE: HAZARDOUS WASTE INCINERATION-A GREENPEACE REPORT (1990).
[29] The report was an initial step in the Agency's response to environmental equity concerns. EPA, WORKGROUP REPORT TO THE ADMINISTRATOR, ENVIRONMENTAL EQUITY: REDUCING RISK FOR ALL COMMUNITIES, VOL I (1992).

protection programs.[30]

In this report, EPA also concluded that the minority and low-income populations experience higher than average exposures to certain air pollution, hazardous waste facilities, contaminated fish, and agricultural pesticides in the workplace. The report furthered that a significant higher percentage of African-American children, compared to white children, have unacceptably high blood lead levels.[31]

Moreover, in 1992, the *National Law Journal* (NLJ) conducted an 8-month investigation that examined the relationship between race and the enforcement of environmental laws by the EPA.[32] The study concluded that EPA had discriminated against minority communities in the cleanup of hazardous waste sites and the protection of environmental law violations.[33]

2.2 Environmental justice: distributive & political

According to Alice Kaswan, there are two forms of injustice presenting two different kinds of injuries and requiring two different types of solutions.[34]

Distributive justice: environmental justice concerns are raised by the disproportionate burden of environmental hazards or undesirable land uses borne by low-income and minority communities.[35]

As the words "no pains, no gains," all communities must be expected to bear some such burdens as unavoidable by-product of a complex industrial society. But whether these burdens are equitably distributed among communities is a central theme of the environmental justice movement.[36] As those reports presented above, minority and low-income communities currently endure undesirable lane uses to a greater extent than other communities.

Political justice: environmental justice concerns are raised by the discriminatory manner in which decisions with environmental consequence are made.[37] This concerns the fairness of the decision-making process. Professor Ronald Dworkin captures this conception of justice with his reference to the ideal that "all citizens should be treated

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[30] *Id*.
[31] *Id*.
[32] Marianne Lavelle & Marcia Coyle, *Unequal Protection: The Racial Divide in Environmental Law*, NAT'L L.J. Sep. 21 1992. The finding also suggested that unequal environmental protection, a form of environmental injustice, is placing communities of color at special risk.
[33] *Id*, at s2.
[34] Alice Kaswan, *Environmental Justice: Bridging the Gap Between Environmental Laws and "Justice"*, 47 AM. U. L. REV. 221 (1977).
[35] *Id*.
[36] John S. Applegate, *supra note* 7, at 1109.
[37] Alice Kaswan, *supra note* 34.

with equal concern and respect".[38] Generally, "environmental racism" describes a type of political injustice, presenting the situation of the failure to treat minority communities with the same concern and respect as white communities.

Claims for environmental justice often include both distributive and political constituents.[39] Hence, how to improve distributive injustice and political injustice, which means how to improve the poor and minority people the status of economic and political incapacitation, will be the most important issue.

2.3 Current situation and the obstacles (challenge) the Movement faces

In many local setting, the political justice, one of components of the environmental justice movement, becomes the central as the achievement of improved environmental quality. In addition to seeking financial support and funding, grassroots debates have been employed as strategies to increase the political status of burdened community to influence possible decisions made by agencies. Moreover, questions of political justice arise in a variety of settings, from the typical siting dispute to government policy, enforcement, or remediation decisions.[40]

Since government and industry are unlikely to announce intentional discrimination against low-income or minority community, instance of unfair treatment may be difficult to identify. Moreover, agencies lack sufficient resources to inspect and enforce every violation, and usually agencies have considerable discretion in choosing enforcement priorities.[41] Hence, the best way to deal with will be the procedural protection and re-defining standards of judicial review to environmental justice.

In addition to siting, taking the land of low-income minority groups in order to transfer ownership to private businesses or developers under a public use theory raises equally substantive environmental justice issues as does the discriminatory siting of environmental hazards.[42]

For many years, toxic waste sites and pollution hot-spots have been located in poor and minority areas where residents do not have the political or economic clout to protest and protect themselves effectively.[43]

The Supreme Court of the United States held, in ***Kelo v. City of New London,*** that land could be taken from private citizens to create a waterfront hotel and business area

[38] Ronald Dworkin, TAKING RIGHTS SERIOUSLY (1977).
[39] John S. Applegate, *supra note* 7, at 1110.
[40] *Id*, at 1111.
[41] *Id*.
[42] Catherine E. Beideman, *supra note* 6, at 273.
[43] *Id*.

consisting primarily of private industries.[44] With this decision, the Supreme Court accepted the broader definition of public use,[45] and recognized that private land may be taken for what is not, by traditional definition, a public use.[46] The Court also specified that an economic development project can satisfy the conditions of a public purpose for the land and is thus an acceptable result under the public use doctrine.[47]

The homeowners and residents targeted for takings actions are typically politically isolated, low-income, and minority groups, the same as in the siting cases. Local governments choose these groups to bear the brunt of these decisions because they lack the resources and access to political decisionmakers necessary to defend themselves against such decisions.[48]

The desire for economic rejuvenation of depressed areas is a reasonable goal for any local government; however, economic development at the expense of the poorest and most vulnerable portions of a community is unreasonable. The intent of economic improvement is a valid one, but courts should not continue to consider it valid when the action has a clearly disproportionate impact on a particular group, no matter this group is the minority or not.[49]

3. Approaches of addressing problems

Despite increased political attention to the problem of environmental injustice, the environmental justice movement in the legal context has been facing many obstacles on the way achievement.

3.1 Constitutional Law Claim—Equal Protection Law

There are at least 33 nations and 12 American states recognize a constitutional right to environmental quality.[50] However, reflecting uncertainty in the causes and proof environmental injustices, legal theories to redress such injustices are still in the very beginning of development.[51] The civil rights advocates used to claiming the Equal

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[44] 125 S. Ct. 2655 (2005).
[45] There are at least two interpretations of public use: **use by the public** and **use for public advantage**. "The latter interpretation is more expansive and includes anything that tends to enlarge resources, increase industrial energies ... [and] manifestly contributes to the general welfare and the prosperity of the whole community." Courts have moved increasingly away from the former view toward the latter because use by the public is too narrow and requires condemned land to be used directly by the public. Catherine E. Beideman, *supra note* 6, at 275-76.
[46] *Id*, at 279.
[47] 125 S. Ct. at 2665.
[48] *See*, James H. Colopy, *The Road Less Traveled: Pursing Environmental Justice through Title VI of the Civil Right Act of 1964*, 13 STAN. ENVTL. L.J. 125, at 135 (1994).
[49] Catherine E. Beideman, *supra note* 6, at 294.
[50] See, Rodger Schlickeisen, *Protecting Biodiversity for Future Generations: An Argument for a Constitutional Amendment*, available at http://www.defenders.org/bio-co06.html
[51] John S. Applegate, *supra note* 7, at 1113.

Protection to defend the environmental justice.

According to Equal Protection Clause of the constitution of U.S., a plaintiff must prove that a particular decision (ex. the siting of a particular facility) had a disparate impact on a protected group, and the decision was motivated in part by discriminatory intent.[52]

In ***Washington***,[53] the Supreme Court ruled that the plaintiff was required to prove discrimination intent. It further said that "disproportionate impact is not irrelevant, but it is not the sole touchstone of an invidious racial discrimination forbidden by the Constitution."[54] However, because decision makers would never explicitly state that its siting (taking) decision is based on racial grounds, plaintiffs have to provide, through indirect evidence, that the decision was motivated by discriminatory purpose.

In ***Arlington Heights***,[55] the Court suggested that five factors be taken into account to decide if the discriminatory intent exists: (1) The impact of the official action; (2) The historical background of the decision; (3) The sequence of events; (4) Substantive or procedural departure from the normal decision-making process; (5) The legislative and administrative history.

However, although when plaintiffs can show direct evidence of a defendant agency's intent to discriminate, the government still has a second chance if they can prove that they would have taken the same action in the absence of intent to discriminate.[56] As the result, not only does the plaintiff have to show that the decision is motivated by intentional discrimination, but also that the discrimination must be prejudicial.

3.2 Civil Rights Law

Title VI of the Civil Rights Act of 1964[57]

Title VI prohibits discrimination by programs and governmental entities that receive financial assistance from the federal government. This Act also provides a channel for the public to challenge governmental environmental programs, policies, and decisions.[58]

The key provisions are §§ 601 and 602.

Section 601 of Title VI provides that no person shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be

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[52] *Id*.

[53] *Washington v. Davis*, 426 U.S. 229 (1976).

[54] *Id*, at 242. Prior to 1976, some federal courts allowed plaintiffs to prevail on equal protection claim if they established that the challenged practice had a statistically discriminatory impact. John S. Applegate, *supra note* 7, at 1113.

[55] *Village of Arlington Heights v. Metropolitan Housing Development Corp.*, 429 U.S. 252 (1977).

[56] David Monsma, *Equal Right, Governance, and the Environment: Integrating Environmental Justice Principles in Corporate Social Responsibility*, 33 ECOLOGY L.Q. 443, at 461 (2006).

[57] 42 U.S.C. §§ 2000d-2000d-7 (1994).

[58] *See*, Uma Outka, *Environmental Injustice and the Problem of the Law*, 57 ME. L. REV. 209, at 223 (2005).

subjected to discrimination under any program or activity receiving Federal financial assistance.[59] In ***Guardians Ass'n v. Civil Service Commission***,[60] the Supreme Court held that § 601 requires the same showing of discriminatory intent that ***Washington v. Davis*** required in equal protection cases.

Section 602 authorizes federal agencies and departments that provide federal money to promulgate regulations to implement the requirements of **§ 601**.[61] Under this mandate, federal agencies are empowered to prohibit financial recipients from using the funds to support any project or practice that would produce discriminatory effects, regardless of the intent.[62]

However, the Supreme Court, in ***Alexander v. Sandoval***,[63] held that Title VI did not provide them with a freestanding private right of action to enforce regulations, in the absence of clear intent, promulgated under **§ 602** within the statute to create such a right.[64]

Through the ***Guardians*** and ***Sandoval*** opinions, the Supreme Court has constrained the availability of Title VI protection to follow up its narrow interpretation of the Equal Protection Clause, and then virtually precluded environmental injustice from being recognized as a legitimate civil rights concern, which advocates had been trying to pursue as their strategy achieving environmental justice, under Title VI.[65]

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[59] 42 U.S.C. § 2000d (1994).

[60] 463 U.S. 582 (1983).

[61] 42 U.S.C. § 2000d-1 (1994).

[62] *See*, Uma Outka, *Environmental Injustice*, *supra note* 58, at 224. In *South Camden Citizens in Action v. New Jersey Department of Environmental Protection*, the court found that, among other things, the NJDEP failed to consider the racial composition of Waterfront South, its cumulative environmental burden, and residents' preexisting health problems. Based on these findings, the court concluded that "this failure to consider the totality of the circumstances surrounding the operation of [the] proposed facility, violates the EPA's regulations promulgated to implement Title VI ... [and] Plaintiffs have established **a prima facie case** of disparate impact discrimination based on race and national origin in violation of the EPA's regulations." *S. Camden Citizens in Action v. N.J. Dep't of Envtl. Prot.*, 145 F. Supp. 2d at 451-52 (2001).

[63] 532 U.S. 275 (2001). (discussing a case involving whether Spanish-speaking persons could sue a state for discrimination under Title VI for establishing an English-only requirement for obtaining a driver's license. The court held that: "neither as originally enacted nor as later amended does Title VI display an intent to create a freestanding private right of action to enforce regulations promulgated under § 602 [which proscribed activities having disparate impact on racial groups]. We therefore hold that no such right of action exists.")

[64] Scalia's reasoning for this conclusion, began with the following definitive statement: Three aspects of Title VI must be taken as a given. **First**, private individuals may sue to enforce § 601 of Title VI and obtain both injunctive relief and damages .... **Second**, ... § 601 prohibits only intentional discrimination .... **Third**, regulations promulgated under § 602 of Title VI may validly proscribe activities that have a disparate impact on racial groups, even though such activities are permissible under § 601. Scalia proceeded to reason that, it is clear now that the disparate-impact regulations do not simply apply § 601, and therefore clear that the private right of action to enforce § 601 does not include a private right to enforce these regulations. *Id*, at 279-81, and 285.

[65] *See*, Uma Outka, *Environmental Injustice*, *supra note* 58, at 226. Scholars point out that the language in

Moreover, because this only applies to federally funded programs, private industries and state-run enterprise that do not receive federal assistance are not regulated and limited by the Title VI.[66]

Section 1983 of the Civil Rights Act of 1871[67]

According to this Act, "every person who, under color of any statute, ordinance, regulation, custom, or usage, of any State … subjects, or causes to be subjected, any citizen of the United States … to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit in equity, or other proper proceeding for address."[68]

In ***Blessing v. Freestone***,[69] the Supreme Court requires plaintiffs to allege a violation of a federal right, not just a violation of federal law. Further, the Court outlined three factors for determining whether the statutory provision in question gives rise to a federal right:

First, Congress must have intended that the provision in question benefit the plaintiff. **Second**, the plaintiff must demonstrate that the right assertedly protected by the statute is not so vague and amorphous that its enforcement would strain judicial competence. **Third**, the statute must unambiguously impose a binding obligation on the States. In other words, the provision giving rise to the asserted right must be couched in mandatory, rather than precatory, terms.[70]

In ***S. Camden***[71], the Third Circuit held that federal regulation alone may not create a right enforceable through section 1983 not already found in the enforcing statute." The court further reasoned that if intentional discrimination is required to establish a right under **§ 601**, "it does not follow that the right to be free from disparate impact discrimination can be located in **§ 602**. In sum, the regulations {in this case}, though assumedly valid, are not based on any federal right present in the statute."[72]

Hence, according to the courts' opinions, the existence of federal right is prerequisite, and discriminating intent and disparate impact are also required. Therefore, EPA's disparate impact regulations do not support a right enforceable through a § 1983 action.[73]

Sandoval strongly suggested that it would later be read to eliminate the ability of plaintiffs to enforce disparate-impact regulations through § 1983, as confirmed in *South Camden III*. *See*, David Monsma, *supra note* 56, at 464.

[66] John S. Applegate, *supra note* 7, at 1126.

[67] 42 U.S.C. § 1983 (1994).

[68] *Id*.

[69] 520 U.S. 329 (1997).

[70] *Id*, at 340-41.

[71] *S. Camden Citizens in Action v. N.J. Dep't of Envtl. Prot.*, 274 F.3d 771, 790 (3d Cir. 2001).

[72] *Id*.

[73] This opinion has been sharply criticized. Requiring the plaintiff to establish not just the existence of a

These decisions are controversial, but important, precedents, because they may undermine efforts to protect minority communities from disproportionate environmental burdens using § 1983.

3.3 The Environmental Laws

There are many approaches to regulate the public health, safety, and environment. Most of our environmental laws require polluters to obtain technology-based permits that meet specified standards and to comply with regulations in their operations under the permit. Hence, permits and other statutory requirements are also prime targets for environmental justice advocates.[74]

In addition, the major environmental laws contain citizen suit provisions that allow individuals and community groups to bring a suit as a strategy of citizen enforcement against polluters to require them to comply with the law or to sue EPA if it fails in its mandatory enforcement duties.

However, these provisions have limitations for addressing environmental injustice. For example, standing and ripeness can be easily challenged, remedies are limited and might be too late, and the burden of proof is overloaded because it is often difficult for those affected communities to prove a violation is taking place or the causation between pollutions and harms. All of these place too great a burden on individuals and local communities to self-protect against environmental harm.[75]

Also, taking the National Environmental Policy Act (**NEPA**) as another example, the purpose of the NEPA is to assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings. This goal is what environmental justice has been also pursuing.[76]

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federal right but the congressional intent for that right to be enforceable through Section 1983 is too substantial and unpredictable a demand. Critics even argued that the **"*Chevron* doctrine,"** which directs federal courts to defer to reasonable administrative interpretations of federal law, should be sufficient to require recognition of § 1983 actions based on regulations. Uma Outka, *Environmental Injustice*, *supra note* 58, at 229-30.

[74] Under the **RCRA**, for example, a community group can sue anyone who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment. 42 U.S.C. § 6972(a)(1)(B)(2000).

Under the **CAA**, a community group can sue anyone alleged to have violated . . . or to be in violation of . . . an emission standard or limitation covered under the Act. 42 U.S.C. § 7604(a)(1)(2000). Community groups can also sue certain entities for violating procedural requirements.

Moreover, **in California**, advocates sued plumbing distributors under the state's Safe Drinking Water and Toxic Enforcement Act for discharging lead into drinking water. *Mateel Envtl. Justice Found. v. Edmund A. Gray Co.*, 9 Cal. Rptr. 3d 486, 488 (Cal. Ct. App. 2003).

[75] Uma Outka, *Environmental Injustice*, *supra note* 58, at 235.

[76] Uma Outka, *NEPA and Environmental Justice: Integration, Implementation, and Judicial Review*, 33 B.C. ENVTL. AFF.L. REV. 601 (2006).

According to procedural requirements of NEPA, the federal decision-making should be informed. **NEPA** has long required federal agencies to assess the environmental impacts of proposed major federal actions and their alternatives as part of its goal of encouraging productive and enjoyable harmony between human activities and the environment.[77]

Moreover, under **NEPA**, programs that are managed, funded, or delegated by the federal government are required to consider and disclose information in an Environmental Impact Statement (EIS) to the public before undertaking a project that may have adverse environmental effects.[78] This process requires public notice; allows environmental experts and members of potentially-impacted communities to participate in siting decisions; and can lead to the denial of a permit for the project. A community group may be able to sue an agency for its failure to meet NEPA requirements, at which point a court can issue an injunction preventing the proposed project from moving forward until the EIS is filed properly.[79]

However, because NEPA does not provide an independent right of action, NEPA challenges are brought under the Administrative Procedures Act (APA). But, according to APA, courts usually show deference to agency decisions unless they are arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.[80]

In addition to these environmental laws, other than the Residential Lead-Based Paint Reduction Act enacted in 1992,[81] since 2000, EPA's appropriations bills have contained language preventing the agency from spending any money to implement or administer environmental justice programs under the Title VI of the Civil Right Act.[82]

3.4 **Common Law (Tort Claims -- Nuisance)**

Theoretically, common law public and private nuisance claims can also provide a basis for environmental justice claims against state and local siting decisions.

Typically, in order to bring a public nuisance claim, the plaintiff must prove there has been an unreasonable interference with a right common to the general public. In determining the unreasonableness of the interference one must consider whether the conduct involves a significant interference with the public health, the public safety, the

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[77] 42 U.S.C. §§ 4321, 4332.

[78] 42 U.S.C. § 4332(2)(C)(Supp. III 2000).

[79] *See*, Alina Das, *The Asthma Crisis in Low-Income Communities of Color: Using the Law as A Tool for Promoting Public Health*, 31 N.Y.U. REV. L. & SOC. CHANGE 273, at 298 (2007).

[80] 5 U.S.C. § 706(2)(A)(2000). Also *see*, Uma Outka, *Environmental Injustice*, *supra note* 58, at 237.

[81] This legislation authorized $375 million for inspection and lead abatement actions in low-income housing, required the EPA to set up training and certifications programs for lead abatement contractors, and provided grants to the state to develop their own lead abatement and training programs. *See*, Evan J. Ringquist, *supra note* 14, at 253.

[82] *Id*.

public peace, the public comfort, or the public convenience. Other considerations are whether the nuisance is proscribed by a statute, ordinance or administrative regulation or is of a continuing nature or has produced a permanent or long-lasting effect and the actor knows or has reason to know that the action has a significant effect upon the public right. In order to recover in a public nuisance claim, the plaintiff must have suffered a harm of a kind different from that suffered by other members of the public or have authority as a public official or public agency to represent the state or a political subdivision in the matter, or otherwise have standing to sue as a representative of the general public.[83]

For a private nuisance claim, a plaintiff must prove (1) that there has been a nontrespassory invasion of his interest in the private use and enjoyment of his land which has resulted in substantial harm, and (2) that the invasion is intentional and unreasonable, or is unintentional and otherwise actionable under the rules controlling liability for negligent or reckless conduct, or for abnormally dangerous conditions or activities.[84]

Along with environmental statutes, such common law tort claims can be used by low-income communities of color to alleviate the harmful pollution emitted from hazardous facilities in their neighborhoods.[85]

However, tort law is retrospective, to repair or compensate a harm that has already occurred, and to demand a high standard of proof of causation of the individual plaintiff's harm.

3.5 Executive Order 12898 (Clinton 1994)[86]

In February 1994, President Clinton issued an Executive Order titled "*Federal Actions to Address Environmental Justice in Minority and Low-income Populations*", directing federal agencies to deal with "disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations."[87]

The Executive Order No. 12898 requires every executive agency to adopt an environmental justice strategy, and creates the Interagency Working Group on Environmental Justice, and encourages public participation to resolve this issue, and requires further research into environmental inequities.[88]

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[83] Kyle W. La Londe, *Who Wants to Be an Environmental Justice Advocate?: Options for Bring an Environmental Justice Complaint in the Wake of Alexander v. Sandoval*, 31 B.C. ENVTL. AFF. L. REV. 27, at 43-44 (2004).
[84] *Id*, at 43.
[85] Alina Das, *supra note* 79, at 301.
[86] Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994), amended by Exec. Order no. 12,948, 60 Fed. Reg. 6381 (Jan. 30, 1995).
[87] *Id*, at 7629.
[88] Executive Order No. 12898, 59 Fed. Reg. 7629 (1994).

According to this Order, "Each federal agency shall conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons from participation in, denying persons the benefits of, or subjecting persons to discrimination under, such program, policies, and activities, because of their race, color, or national origin."[89]

Following this Order, President Clinton also released a Memorandum on Environmental Justice that requires all federal agencies to: ensure all programs or activities receiving federal financial assistance that affect human health or the environment do not discriminate on the basis of race, color, or national origin; analyze the environmental and health effects on poor and minority communities whenever an Environmental Impact Statement is required under the National Environmental Policy Act; and ensure poor and minority communities have adequate access to public information relating to human health, environmental planning, and environmental regulation.[90]

As a successor, rather surprisingly, President Bush has allowed the Order 12898 and the accompanying memorandum to remain in force and had done nothing to dismantle the environmental justice infrastructure within EPA.[91] However, his view is still consistent with the Republic Party's efforts pursuing the policy of deregulation and emphasizing that a new era of environmental protection should increase state powers and lessen the micromanagement of Washington Bureaucrats.[92]

The Executive Order has its limited utility[93] because it did not provide a private right of action[94] and courts do not enforce its mandates.[95]

3.6 EPA's interim guidance[96]

On February 5, 1998, EPA issued an interim guidance document on environmental

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[89] Sec. 2-2 *Federal Agency Responsibilities for Federal Programs*, *id*. Also, pursuant to 6-608, Federal agencies shall implement this order consistent with, and to the extent permitted by existing law.
[90] Evan J. Ringquist, *supra note* 14, at 252.
[91] *Id*, at 253.
[92] President Bush also emphasized that environmental policy must be responsive to the needs of development. *See*, Benjamin Kline, *supra note* 16, at 156.
[93] Some critics also assert that more than ten years after Executive Order 12898, the EPA has failed to consistently implement its mandate to integrate environmental justice into its day-to-day operation. *See*, Daniel Faber, *supra note* 21, at 136.
[94] The Order states "it is intended only to improve the internal management of the executive branch and … shall not be construed to create any right to judicial review involving the compliance or noncompliance of the United States, its agencies, its officers, or any other person with this order. " Exec. Order 12,898.
[95] The concept of "Environmental Justice is hardly treated as a fundamental right. *See*, Uma Outka, *Environmental Injustice*, *supra note* 58, at 238. Also see, *One Thousand Friends of Iowa v. Mineta*, 250 F. Supp. 2d at 1084.
[96] EPA, Interim Guidance for Investigating Title VI Administrative Complaints Challenge Permits. http://es.epa.gov/oeca.oej/titlevi.html

justice. The stated purpose is to provide a framework for processing administrative complaints regarding environmental permitting activities within EPA's Office of Civil Rights.[97] The new procedure applies only to permitting decisions made by state and local agencies that receive funding from the EPA.[98] The introduction to the Interim Guidance explains that the document is intended to update the Agency's procedural and policy framework to meet an increasing number of challenges to permitting decisions.[99]

The Interim Guidance is specifically designed to bring the EPA into compliance with Executive Order 12,898 by establishing procedures to ensure that permits issued by EPA-funded agencies do not result in discriminatory effects based on race, color, or national origin.[100]

The guidance states that "individuals may files a private right of action in court to enforce the nondiscrimination requirements in Title VI or EPA's implementing regulations without exhausting administrative remedies."[101] In addition, EPA appeared to shift the burden of proof to the permitting agency. In other words, the state agency not only must establish that the permit is necessary to advance a substantial legitimate interest, but also must prove that there is no less discriminatory alternative.[102]

In sum, The Interim Guidance establishes policies to ensure that federally funded state environmental permit programs do not violate Title VI's antidiscrimination requirement.[103]

The hostile response to EPA's Interim Guidance has come from stakeholder groups with very different concerns and agendas, but each has shared the conviction that the EPA's action was an unwelcome attempt to take away that stakeholder's control over environmental decisionmaking.[104]

Although EPA sought to establish a broad, open-ended process for assessing

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[97] Jeffrey B. Gracer, *Taking Environmental Justice Claims Seriously*, 28 ENVTL. L. REP. 10373 (1998).
[98] EPA, Interim Guidance, *supra note* 96,
[99] *Id*, at 2.
[100] June M. Lyle, *Reactions to EPA's Interim Guidance: The Growing Battle for Control over Environmental Justice Decisionmaking*, 75 IND. L.J. 687, at 695 (2000).
[101] John S. Applegate, *supra note* 7, at 1130. To determine whether a community group has stated a ***prima facie*** case of disparate impact, EPA's interim guidance document provides a broad framework. 1. Identifying the population affected by the permit. 2. Analyzing other permitted facilities in the community and their aggregate impacts on racial and ethnic populations. 3. Comparing the impacts on affected and unaffected populations. 4. Determining whether any observed disparate impacts are significant. The document does not specify how EPA will define the affected and unaffected populations and not define what methodology EPA will utilize to determine whether a disparity is statistically significant. *Id*, at 1131.
[102] *Id.*
[103] June M. Lyle, *supra note* 100, at 687.
[104] Their complaints all voiced the concern that the new policy would take decisionmaking power away from state agencies and introduce significant regulatory uncertainty into state permitting decisions. *Id*, at 697.

environmental justice complaints, this process is separate and apart from the state permitting procedure and takes place after the state issued that permit. This conflict raises serious concerns, and critics even asserted that it would clearly disrupt the management of environmental permitting program.[105] EPA's failure to work with states in drafting the Interim Guidance and failure to recognize states' legitimate need for regulatory certainty has resulted in an unnecessarily high level of backlash from state-level interests.[106]

Moreover, critics also criticize that the EPA's failure to involve grassroots leaders in developing the Interim Guidance is likely to alienate communities that already see the EPA as not protective of their interests.[107]

4. Where the Movement Should Go--Proposal for the solution

The more practical reason for exploring the past, the development of environmental justice movement, is to better comprehend how and why we got where we are today,[108] and help ourselves to find a good way to overcome through those obstacles on the way achieving the environmental justice.

In calling for social empowerment, pollution prevention, direct access to environmental decision making, attention to community preferences in environmental priorities, and the redistribution of economic power, the environmental justice movement covers all races and classes, and all manners of perceived environmental slights.[109]

According to Tseming Yang, basically the environmental laws seek to provide generalized protection from environmental harms by stressing uniform national pollution standards, scientific risk assessment, and neutral procedural requirements; environmental justice needs greater concerns on social justice within those purportedly neutral frameworks.[110]

Hence, we should start from the correction of decision-making procedure to re-build the basic values of due process, accountability, transparency, and participation, and then to put much weight on the concern addressing the social justice by empowering the minority economic and political strengths. Finally, we should establish the fundamental and positive environmental policy of adopting Precautionary principle for the modern environmental protection.

4.1 Making the Process of Decision-Making More Accountable

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[105] John S. Applegate, *supra note* 7, at 1132.
[106] June M. Lyle, *supra note* 100, at 701.
[107] *Id*, at 707.
[108] Benjamin Kline, *supra note* 16, at 1.
[109] Evan J. Ringquist, *supra note* 14, at 257.
[110] Tseming Yang, *Melding Civil Right and Environmentalism: Finding Environmental Justice's Place in Environmental Regulation*, 26 HARV. ENVTL. L.REV. 1, at14 (2002).

In order to rationalize the decisions the agency makes, and also make the process of decision-making more accountable, we should adopt some mechanisms on the procedure of decision-making to improve its quality and enhance its credibility. Here are some examples, but not exhausted ones:

The Risk Assessment

Risk-based decision making is now the dominant language for discussing environmental policy in the EPA and in many other environmental and health regulatory agencies.[111] Risk Assessment has been promoted for comparing environmental and other issues, setting priorities, justifying regulations, setting limits on requirement and expenditures, and rationalizing other environmental policy decision.[112] As advocates support it, under the banner of "good science", risk assessment is a good way to restore public confidence in the agency.[113]

Risk assessment is a technical procedure to obtain quantitative measures of risk levels to human health or the environment, where risk refers to the possibility of uncertain, adverse consequences. According to the Supreme Court's decision in ***Industrial Union Department, AFL-CIO v. American Petroleum Institute*** (the ***Benzene*** case)[114], "safe" does not mean risk free[115], and only for the "significant" risks the agency has the reason to intervene and regulate.

Hence, a broader problem for risk assessment is that many of risk management decisions that EPA and other agencies must make involve far more complex choices, and more complex judgments.[116] As Justice Stevens stated in this case that policy considerations would play a prominent role in determining which risks were "significant" risks, and it will be the agency's responsibility to determine what it considered to be a "significant" risk.[117] In sum, because of uncertainty, there will be the need using politic decision to fill the gaps on science.[118]

Today, there are many federal statutes adopting (quantitative) risk assessment. For

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[111] Richard N. L. Andrews, *Risk-Based Decision Making: Policy, Science, and Politics*, 215, in ENVIRONMENTAL POLICY – NEW DIRECTIONS FOR THE TWENTY-FIRST CENTURY (Norman J. Vig and Michael E. Kraff ed., 2006).
[112] *Id*.
[113] Robert R. Kuehn, *supra note* 4, at 110. There is other issue about how to avoid the politicization of science. Generally *see*, Sidney A. Shapiro, *Politicizing Peer Review: The Legal Perspective*, in RESCUING SCIENCE FROM POLITICS, Regulation and Distortion of Scientific Research 238 (Wendy Wagner and Rena Steinzor ed., 2006).
[114] 448 U.S. 607 (1980).
[115] *Id*, at 642, 655.
[116] Richard N. L. Andrews, *supra note* 111, at 222.
[117] The *Benzene*, at 655.
[118] Given these many unavoidable judgments, the conclusions of health risk assessment often are shaped as much by their assumptions as by facts. Richard N. L. Andrews, *supra note* 111, at 230.

example, the EPA uses it to set levels for pesticide residues in food under Federal Insecticide, Fungicide, and Rodenticide Act; carcinogenic contaminants in drinking water under the Safe Drinking Water Act; industrial discharges of carcinogens to surface waters under the Clean Water Act; and hazardous air pollutant emissions after installation of the maximum achievable control technology under the Clean Air Act.[119]

However, critics assert that quantitative risk assessment is hard to reconcile with the environmental justice because it is not about probabilities, statistical lives, acceptable level of exposure to cancer-causing chemicals, substituting science for democratic decision making, or putting the opinions of experts before the wants and needs of the citizens.[120] Also, the poor and minority communities face accumulative risks of exposures, which are more difficult to estimate.

As one of tools to evaluate risks for rationalizing the agency's decisions, Professor John Applegate offered guidelines for risk assessment and proposed a risk assessment model and procedure.[121] He even emphasized that the environmental justice movement has made clear that risks are not distributed evenly across different populations, like infancy can all make significant differences in susceptibility and degree exposure, so that health risk cannot be completely characterized without considering specially impacted subpopulations, "hot spot" of multiple exposure, and highly exposed persons.[122]

Further, the NRC report in 1996, dealing with how governmental institutions and procedures should be structured to make decisions better and more broadly acceptable, emphasized that participation from interested and affected parties and improvement of understanding risk should be enhanced in risk decisions in our democratic society.[123]

The purpose of risk assessment is to gather, analyze, organize, and present relevant information and risk assessment has to allow for flexibility to account for a variety of applications of the tool.[124]

Following the steps set by the *Red Book*, recognizing its limitation, and making sure that relevant information will be considered, along with due process being confirmed,

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[119] Committee on Risk Assessment of Hazardous Air Pollutants, NATIONAL RESEARCH COUNCIL, SCIENCE AND JUDGMENT IN RISK ASSESSMENT 35 (1994) *See also*, Robert R. Kuehn, *supra note* 5, at 111.

[120] Robert R. Kuehn, *id* , at 167. The author furthered that environmental justice is to adopt the public health approach of seeking to prevent the threat before it occurs and of remedying problems that already exist. *Id.*

[121] John S. Applegate, *Learning From NEPA: Guidelines for Responsible Risk Legislation*, 23 HARV. ENVTL. L. REV. 94 (1999).

[122] *Id*, at 109. He furthered that costs, values, overarching policies, and administrative feasibility all have a place in risk management, so risk assessment ought not to be the sole criterion for regulatory decisions. *Id*, at 110.

[123] NATIONAL RESEARCH COUNCIL, UNDERSTANDING RISK, INFORMING DECISIONS IN A DEMOCRATIC SOCIETY (1996).

[124] Particular efforts should be also made to reach persons and groups who do not have technical expertise to use such materials easily. John S. Applegate, *Learning From NEPA*, *id*, at 110-11, and 120.

risk assessment is a good way to improve the agency's decisions accountability.[125]

The Cost-Benefit Analysis

Cost-Benefit Analysis (CBA) is a mechanism designed to measure the net contribution of any public policy to the economic well-being of the members of society and to help the agency's decisions more acceptable and accountable. The basic idea of CBA is simple: agency should be required to investigate both costs and benefits, to show that benefits justify costs in most circumstances, and to offer a reasonable explanation for any decision to proceed when costs exceed benefits.[126]

President Reagan issued the Executive Order No. 12,291 requiring the cost-benefit analysis for all major regulations and providing that regulatory action shall not be undertaken unless the potential benefits from the regulation outweigh potential costs.[127] President Clinton also issued Exec. Order No. 12,866 specifying that costs ad benefits include both quantifiable and qualitative measures.[128]

According to Sunstein, CBA can give people a more accurate sense of the level of risk, and should help government resist demands for regulation that are rooted in a kind of hysteria and help to ensure producing full accounting in decision-making.[129]

However, the major question is whether the state of the art of measurement is sufficiently well developed to provide reliable estimates of benefits and costs.[130] For example, decision makers seldom get perfect information on benefits and costs.

Some critics think that CBA tends to promote injustice, especially in environmental regulations. Dollar values of all items relevant to the calculation are determined in CBA, as in private markets, by people's willingness to pay for things. Rich people can pay much more than the poor can. By this logic, the result will be that total national wealth is

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[125] NATIONAL RESEARCH COUNCIL, COMMITTEE ON THE INSTITUTIONAL MEANS FOR ASSESSMENT OF RISKS TO PUBLIC HEALTH, RISK ASSESSMENT IN THE FEDERAL GOVERNMENT: MANAGING THE PROCESS (1983). Also, the NRC report in 1996 asserted that coping with a risk situation requires a *broad understanding* of the relevant losses, harms, or consequences to the interested and affected parties and needs to address social, economic, ecological, and ethical outcomes as well as consequences for human health and safety. NRC, UNDERSTANDING RISK, *supra note* 123, at 156-57.

[126] Cass R. Sunstein, THE COST-BENEFIT STATE – THE FUTURE OF REGULATORY PROTECTION, at 22 (2002).

[127] Exec. Order No. 12,291, 3 C.F.R. 127, 128 (1982).

[128] Exec. Order No. 12,866, 3 C.F.R. 638, 649 (1994).

[129] Even for democracy, CBA can protect democratic processes by exposing an account of consequences to public review. Cass R. Sunstein, THE COST-BENEFIT STATE, *supra note* 126, at 9. Proponents from the law and economics tradition argue that CBA ensures that government resources are allocated with maximum efficiency. Stephen Clowney, Note, *Environmental Ethics and Cost-Benefit Analysis*, 18 FORDHAM ENVTL. LAW REV. 105, at 107 (2006).

[130] A. Myrick Freeman III, *Economics, Incentives, and Environmental Policy*, 193, at 198, in ENVIRONMENTAL POLICY – NEW DIRECTIONS FOR THE TWENTY-FIRST CENTURY (Norman J. Vig and Michael E. Kraff ed., 2006).

maximized by locating the waste facility near poor people rather than near rich people.[131]

Also, the common objection to CBA is its insistence on monetizing the value of non-market goods such as human life its lack of procedure transparency, failing to account for intergenerational equity, and even undermining democracy.[132]

Further, an environmental standard set according to the cost-benefit rule will almost never call for complete elimination of pollution. The logical of cost-benefit analysis does not require that those who benefit pay for those benefits or that those who ultimately bear the cost of meeting a standard be compensated for those costs.[133]

It is true that none of those advantages of CBA presented above suggest that CBA is a panacea for the environmental problems, including environmental inequity. As Sunstein emphasized, the central point is that CBA can be seen as a real-world instrument, designed to ensure that the consequences of regulation are placed before relevant officials and the public as a whole, and to focus attention on neglected problems, while at the same time ensuring that limited resources will be devoted to areas where they will do the most good.[134]

In short, an initial CBA is often just the beginning of a dynamic process that allows for careful fact-finding, increased debate, and constant re-evaluation of regulatory aims. With the function of generating information which can enhance deliberative democracy, CBA advances these deliberative principles by injecting clear, easily understood information into complex policy debates.

4.2 Making the Process of Decision-Making More Transparent

According to "Red Light" theories, the role of environmental law, as a kind of administrative law, should be essentially to protect the individuals from an interventionist state.[135] In other words, the primary function of administrative law, including environmental law, should be to control any excess of state power and subject it to legal, and more especially judicial, control.[136] Under these theories, the public participation is a machinery of the traditional model to ensure the fair representation of the affected people to protect their interests.

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[131] The critics further that using CBA to achieve maximum wealth only maximizes what money can buy. Therefore, it is no surprise that maximizing social wealth can interfere with attaining social justice. Peter Wenz, *supra note* 2, at 60, and 75.

[132] Stephen Clowney, *supra note* 129, at 108. Also, *see*, FRANK ACKERMAN & LISA HEINZERLING, PRICELESS, In Knowing the Price of Everything and the Value of Nothing, at 61-89 (2004).

[133] Whether compensation should be paid is considered to be a question of equity or distributive fairness. A. Myrick Freeman III, *supra note* 130, at 196.

[134] Sunstein, *supra note* 126, at 10. Stephen Clowney, *supra note* 129, at 132.

[135] Alfred C. Aman, Jr., *supra note* 11, at 18.

[136] C. Harlow and R. Rawlings, LAW AND ADMINISTRATION, 37 (1997).

On the contrary, there are the theories of "Green Light", starting from the New Deal, claiming that the activist role the state should play involves not only the protection of the individual from the state, but also the implementation of federal programs designed to help the public.[137] Although these theories take as a given the appropriateness of state intervention, they still need to be ensured that these programs are implemented as fair and efficiently as possible. Therefore, the participation is seen as a mean on decision-making processes to the end of fair implementation.

Hence, in any event,[138] the reasons supporting the public participation are not only that the affected parties know more about the facts, but also that, under this procedure, it will further the accurate selection made by the agency, and increase the acceptability to the agency, the participants, and the public.[139] Furthermore, public participation in the decision-making process can legitimize increased governmental action by unelected agency officials.[140]

Therefore, it is clear that the idea of environmental justice is not exhausted by the notion of distributive justice. Advocates argued that it was "*participatory justice*" that was the primary demand of communities such as Afton, North Carolina.[141]

Poor and minority people objected not only to the fact that they were being subjected to risks, but also to exposure without their consent and without institutional mechanisms that would allow them to articulate their opposition.[142]

Actually, environmental laws and regulations at the federal and state level require agencies to involve the public in decision making by holding open meetings, ensuring

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[137] Alfred C. Aman, *supra note* 11, at 21.

[138] Moreover, pursuant to the "Republican", Sunstein asserted that the role of politics was above all deliberative, therefore, dialogue and discussion among the citizenry are critical features in the governmental decision-making process. *See*, Sunstein, *Interest Groups*, 38 STAN. L. REV. 29, at 31 (1985).

[139] Such participation will not only improve the quality of agency decisions and make them more responsive to the need of the various participating interests, but is valuable in itself because it gives citizens confidence in the fairness of government decisions. *See*, Richard Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1667, at 1760 (1975).

[140] Alfred C. Aman, *supra note* 11, at 22.

[141] Dale Jamieson, *supra note* 19, at 91.

[142] The centrality of participatory justice to environmental justice is also indicated by the fact that the "**Principles of Environmental Justice**", adopted by the First National People of Color Environmental Leadership Summit in 1991, emphasized "***self-determination***" and "***respect for diverse cultural perspectives***" rather than distributive justice. *See*, Dale Jamieson, *id*. The major product of the summit was a statement of the (seventeen) principles of environmental justice, serving as criteria for developing and evaluating policies aimed at attaining environmental justice. Among the principles were demands for public policy to be based on mutual respect and justice for all people and for the right to participate as equal partners at every level of environmental decision-making. *See*, Environmental Justice Resource Center, *Principles of Environmental Justice* (1991), available at http://www.ejrc.cau.edu/princej.html. To accomplish these goals the statement calls for full representation and effective participation of minority groups and the poor. *See*, Evan J. Ringquist, *supra note* 14, at 241.

access to information, providing comment periods, responding to comments, and in some cases, holding public hearings.[143]

However, the democratic and technocratic forms of decision-making maintain a creative dialectic in the U.S. regulatory process. Facing science, especially about its uncertainty, EPA and FDA seem to be willing to tolerate departures from the democratic science policy paradigm in favor of more expert-centered processes.[144]

Hence, how poor and minority people can access and understand the scientific information the agency adopts as their basic data for those decisions will be a critic issue when those communities are going to challenge the agency's decisions. Also, in order to achieving substantively and effectively participation, the affected groups have the right to know what they need about the agency's informed decision and the agency has the obligation to make a full explanation for its final decisions. Moreover, the NRC report in 1996 furthered that there are compelling rationales for broad participation in the process of risk assessment, not limited to risk management which is traditional political process.[145]

4.3 Re-define the Standard of Judicial Review to "Economic Discrimination"

One of the pivotal issues in environmental law today is the scope of judicial review of an agency's action.[146] The purpose of judicial review of administrative decision making generally is to assure legitimacy and at least minimum levels of fairness. The general practice is that a court will give less deference to an agency's legal conclusions than to its

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[143] *See, e.g.*, Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 136 (2000); Clean Water Act, 33 U.S.C. §§ 1365, 1344(o), 1342(j) (Westlaw 2004); National Environmental Policy Act, 42 U.S.C. §§ 4332(C), 4368 (1994); Resource Conservation and Recovery Act, § 42 U.S.C. § 6974 (Westlaw 2004).

[144] In order to avoid scientific controversy, agency tends to span the continuum from full democratic participation to specialized expert deliberation. Sheila Fasanoff, THE FIFTH BRANCH, SCIENCE ADVISERS AS POLICYMAKERS, at 228 (1990).

[145] There are normative, substantive, and instrumental rationales supporting broad participation in risk decisions. *See*, NRC, UNDERSTANDING RISK, *supra note* 123,at 23-26. Furthermore, advocates assert that procedural justice requires looking not just to participation in a process but to whether the process is designed in a way to lead to a fair outcome. *See*, Uma Outka, *supra note* 58, at 237.

For example, in ***El Pueblo Para el Aire y Agua Limpio v. County of Kings***, a community group contested the siting of a toxic waste incinerator by arguing that the County had violated the public participation provisions of the California Environmental Quality Act (CEQA). 22 ENVTL. L. REP.20,357 (Cal. Super. Ct. Dec. 30, 1991) CEQA requires a public comment period to address environmental impact reports (EIRs) prepared for proposed facilities. Kings County published the EIR in English, even though Kettleman City, the proposed site for the incinerator, was ninety-five percent Latino and forty percent monolingual Spanish-speakers. Community residents argued that to comply with CEQA in Kettleman City required Spanish translation of the EIR documents. The judge agreed and overturned the County's approval of the incinerator based on this and other claims. Uma Outka, *id*, at 235-36.

[146] There are critics asserting that litigation does not allow for adequate public participation in important environmental decisions, its costs are often prohibitive to interest groups, the process of litigation is also time consuming, and it is ineffective for resolving the issues at stake in environmental disputes. *See*, Rosemary O'Leary, *Environmental Policy in the Courts*, 148, at 166-67, in ENVIRONMENTAL POLICY – NEW DIRECTIONS FOR THE TWENTY-FIRST CENTURY (Norman J. Vig and Michael E. Kraff ed., 2006).

factual or discretionary decisions.[147]

According to Rosemary O'Leary, there are five ways the Court can shape environmental policy: by adopting "standing" to control who may sue to affect the environmental policy agenda; by deciding which cases are "ripe" to make the Court be powerful gatekeeper; by choosing the standard of review; by interpreting environmental law; and by choosing the remedies.[148]

Economic disadvantage is an essential part of the environmental injustice problem that courts consistently neglect to consider when they evaluate these claims. Excluding poverty from legal consideration is contrary to what we know about the unequal distributional patterns of environmental burdens, it undermines our civil rights laws, and it perpetuates status quo environmental injustice.

In ***San Antonio Independent School District v. Rodriguez***, the Supreme Court explicitly refused to apply heightened scrutiny to claims based on alleged economic discrimination.[149] The Court held that wealth discrimination was not an adequate basis for strict scrutiny because the poor have none of the traditional indicia of suspectness: the class is not burdened with such disabilities, or subjected to such a history of purposeful unequal treatment, or relegated to such a position of political powerlessness as to command extraordinary protection from the majoritarian political process.[150] The Court further analyzed the case under the rational basis standard (standard of judicial review) and upheld the finance system, concluding that it rationally promoted a legitimate state purpose or interest.[151]

Environmental justice advocates believe that low-income and minority communities are much more vulnerable to the political process than the Court presumed. Therefore, environmental justice calls for a heightened degree of scrutiny for economic discrimination claims, especially when combined with racial discrimination claims.[152]

According to precedents of Supreme Court, racial classifications are of the highest concern and command the strictest scrutiny,[153] and regarding economic affairs the Court

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[147] *See*, *Chevron v. NRDC*, 467 U.S. 837 (1984).

[148] Given the precedent-setting nature of court orders, a judicial interpretation made today determine not only current environmental policy but also that of the future. Rosemary O'Leary, *supra note* 146, at 152-53,

[149] 411 U.S. 1 (1973). This case was a class action suit by Mexican-American parents on behalf of poor families, alleging that the school financing system, based on property taxes, produced unconstitutional disparities in per-pupil spending between school districts.

[150] *Id*, at 28.

[151] *Id*, at 55. Rational basis standard is a permissive standard and a strong presumption of validity. Like economic affairs, the courts usually present the deference to agencies' decisions, especially after the *Lochner* era when "substantive due process" collapsed.

[152] Uma Outka, *Environmental Injustice*, *supra note* 58, at 247.

[153] Function of the law is to create categories where like cases are treated alike. Court makes substantive

usually adopts the rational basis standard. However, in the area of environmental injustice, once the poor or the color can prove that they (1) have suffered disproportionate burden of environmental harm and (2) lacked the political and economic strength to present their voice, although they might not deserve the remediate affirmative action, at least, the Court better to adopt the higher standard, like intermediate scrutiny, to review the existing problem of social injustice.[154]

Hence, because of history of discrimination amounting to political and economic incapacitation, we need to limit democracy to some extent through court involvement, the justification for courts' intervention.[155] Further, the Court should put the burden on the State to offer an exceedingly persuasive reason for the challenged measure, showing that it serves important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those objectives.[156]

Moreover, as we know that there always is trade-off between environmental protection and job opportunities and tax revenues for the poor or color people, to addressing this kind of economic discrimination by getting the Court involved is a necessary approach.

The realities of environmental injustice and the role that economic disadvantage plays in the distribution of environmental hazards both provide a strong argument for higher than rational judicial scrutiny of economic discrimination claims.

4.4 Employing the Precautionary Principle and Shifting the Burden of Proof

As Robert Bullard had observed in 1994, there are five basic elements of the environmental justice framework and two important ones are: a preference for prevention strategies, a shift to polluters and dischargers of the burdens of proof**.**[157]

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judgments on which bans are allowed: the suspect classification deserves strict scrutiny; other classification requires rational basis analysis. In details, if it is racial animus, it will be *per se* unconstitutional; if it is not racial animus but a racial classification, it needs *strict scrutiny* which must (1) have compelling state interest (such as remediation of past wrongs and diversity of students at university) and (2) adopt least restrictive alternative to maintain its constitutionality; if there is no racial classification, the Court will employs rational basis standard to review it. If it is facially neutral but has disparate impact in fact, there will be need showing intent of racially discrimination. *See*, *Loving v. Virginia*, 388 U.S. 1 (1967); *Washington v. Davis*, 426 U.S. 229 (1976).

[154] The cases of affirmative action, *see*, *Regents of University of California v. Bakke*, 438 U.S. 265 (1978); *Adarand Construction, Inc., V. Pena*, 515 U.S. 200 (1995). For strict scrutiny, it needs an identified discrimination existing, which means that we need to know "perpetrator," and "victim," and the remedy must be exacting and go to exact people who have suffered from discrimination. But, it is difficult to prove. About intermediate scrutiny, it is for societal discrimination and requires showing substantial (important) state interest, and law must be substantially related to that state interest and exceedingly persuasive justification. This standard is usually used in gender cases.

[155] *See*, *Frontiero v. Richardson*, 411 U.S. 677 (1973).

[156] *See*, *United States v. Virginia*, 518 U.S. 515 (1996).

[157] The other three elements are: a right of all individuals to be protected from pollution, a definition of discrimination that includes disparate impacts and statistical evidence, and an emphasis on targeted action to redress unequal risk burdens. Robert D. Bullard, *supra note* 6, at 3, 10.

Among most federal environmental regulations such as CAA and CWA, the environmental policy is usually targeted at cleaning up existing pollution and limiting the quantity released into the environment. Regulations are not aimed at eliminating the production of the harmful pollutant. This approach is ineffectual because pollution control measures only aim to limit public exposure to some extent, which is called "tolerable levels," of industrial toxins. As a result, this approach, emphasized over pollution prevention measures, cannot deter whole families of dangerous pollutants from being produced in the first place.[158]

However, environmental Justice is not just about requiring more fairly distributing pollution risks, which causes all people harmed equally. Rather, scholars further assert that the need is for a more "productive" environmental justice policy in preventing environmental risks from being produced in the first place, so that no one is harmed at all.[159]

Also, most environmental policy is predicated on the use of risk assessment to determine whether a substance or practice should be regulated; however, the science standards of proof for demonstrating the vast array of potential health impacts of a chemical are very difficult to demonstrate conclusively.[160] Hence, it is difficult for the government to justify protective action by demonstrating a cause-effect relationship between exposure to pollutants in the environment and the harms.

Therefore, in cases where there is a strong potential for adverse health effects from an activity, but not yet definite proof, the principle of Precaution should be adopted.[161] In other words, when facing with scientific uncertainty, the agency should "err on the side of safety," rather than rely exclusively on established scientific facts.[162]

In ***U.S. Environmental Protection Agency v. Reserve Mining Co.***,[163] the Court

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[158] *See*, Daniel Faber, *supra note* 21, at 147.

[159] The critic claims that the struggle for environmental justice must be about the politics of production per se and the elimination of the ecological threat, not just the fair distribution of ecological hazards via better government regulation of inequities in the marketplace. *Id*, at 145.

[160] More than 70 percentages of the 3000 high-production-volume chemicals produced by industry have not undergone even the simplest health and safety testing. *Id*.

[161] According to Prof. John Applegate, "Precaution" is one of the principle goals of Congress in drafting and of the EPA in administering environmental legislation, such as implementation of "margins of safety" under the CAA, in U.S. law, and "Precaution" might be a preference moving from a tort-based system for environmental harm to risk-based regulatory system, but not a principle yet because the agency puts much weigh on the standard of "unreasonable risk" that permits the agency to consider health and environmental effects together with cost, technological feasibility, and other relevant facts, in an integrated fashion. John S. Applegate, *The Taming of the precautionary Principle*, 27 WM. & MARY ENVTL. L. & POL'Y REV. 13 (2002).

[162] Thomas O. McGarity, *The Story of the Benzene Case: Judicially Imposed Regulatory Reform through Risk Assessment*, in ENVIRONMENTAL LAW STORIES, at 146 (Richard J. Lazarus and Oliver A. Houck ed., 2005).

[163] 514 F.2d 492 (8th Cir. 1975).

confronted scientific uncertainty and quoted it from testament "I have to err, if err I do, on the side of what is best for the greatest number."[164] Under this approach, it is better to err on the side of avoiding the harm if reasonably possible and requires that the regulatory response be proportionate to the damager.[165]

In sum, instead of measuring and defining an acceptable level of risk from a hazard, environmental justice should employ the public health approach of not only remedying problems that already exist, but seeking also to prevent the threat before it occurs.[166]

Moreover, when we accept risk as the basis for environmental regulation, the burden of uncertainty must lie with the risk-creator.[167] Like the registration system under the FIFRA, it requires the proponent of product (or an activity) to demonstrate the safety of a product (or activity) in advance. It places the applicant in the position of shouldering the burden of proof.[168] The purpose of the shift has two folds, to place on hold pesticides whose safety is doubted by EPA, and to create an incentive for the producers and users of pesticides to provide good safety data.[169]

Hence, because the industry has predominance over the poor and minority communities in every aspect, the burden of proof should be shouldered on the industry to prove its pollutants are safe or the existing risk is acceptable.

In short, the practical effect of the precautionary principle should establish a more explicit presumption on the side of environment and health protection, and place more of the burden of proof on businesses to prove safety rather than on the regulator to prove harm.[170]

Finally, in order to achieve environmental justice, not only should we assure that a right of all individuals to be protected from pollution and an emphasis on targeted action to redress unequal risk burdens, but we also need to make a preference for prevention strategies and a shift to polluters and dischargers of the burdens of proof.

5. Conclusion

The idea of environmental justice is multidimensional. It concerns the distribution of the benefits and burdens of our interactions with the environment, the need for

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[164] *Id*, at 519.
[165] John S. Applegate, *The story of Reserve Mining: Managing Scientific Uncertainty in Environmental Regulation*, in ENVIRONMENTAL LAW STORIES, at 74-75 (Richard J. Lazarus and Oliver A. Houck ed., 2005).
[166] Robert R. Kuehn, *supra note* 4, at 167. Precautionary Principle identifies scientific uncertainty as the central problem in environmental regulation
[167] Otherwise, uncertainty would be a insurmountable barrier to the environmentally protective action that Congress intended. *See*, John S. Applegate, *The story of Reserve Mining*, *supra note* 165, at 74.
[168] John S. Applegate, *The Taming of Precautionary Principle*, *supra note* 161.
[169] *Id*.
[170] Richard N. L. Andrews, *supra note* 111, at 232.

participation in decision that concerns the environment, and the importance of expanding our conception of who is within the domain of justice.[171]

About promoting social justice, as Robert Bullard had emphasized, unless environmental initiatives can address the profound economic concerns of poor or minority communities, they are likely to end up siding with corporate managers in key conflicts concerning the environment.[172] In other words, if the movements for environmental justice cannot first address the larger political and economic forces that compel communities to make such trade-offs, their ability to achieve significant improvements will remain limited, because the low-income communities might easily accept the polluting industrial facility because of the greater job opportunities and tax revenues it affords.[173]

If the EPA wants to have credibility with the public interests, especially for those affected parties, it must provide interested people with concrete, real-world examples of the simultaneous achievement of increasing economic development and ensuring environmental protection.[174]

Finally, litigation is certainly not a panacea for communities facing environmental crisis, including environmental justice. Every area of the statutes, regulations, and Executive Order and guidance discussed above has limitations when used in litigation. The decision to pursue a legal action is always a difficult one, requiring careful consideration of the risks and rewards.

Therefore, in this collaborative context, an awareness of the law does not lead to contentious litigation, but instead to a better understanding of each entity's rights and responsibilities.[175] And then, as I believe, we are on the right way achieving the environmental justice in our modern democratic society.

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[171] Dale Jamieson, *supra note* 19, at 98.
[172] Robert Bullars, *supra note* 5, at 23.
[173] In short, market rationality plays a large part in selecting the location for facilities. *See*, Evan J. Ringquist, *supra note* 14, at 252. Also *see*, Daniel Faber, *supra note* 21, at 153.
[174] June M. Lyle, *supra mote* 100, at 706
[175] Alina Das, *supra note* 79, at 314. From some feedbacks to my draft, financial issues to those environmental groups that devote great efforts to advocate environmental justice movement are very practical and critical problems; the relationship of cooperation and confliction between federal and state government is another important perspective to discuss environmental justice.