

1-1-2007

# LNG Facility Siting and Environmental (In)Justice: Is it Time for a National Siting Scheme?

Eileen Gauna University of New Mexico - School of Law

Follow this and additional works at: https://digitalrepository.unm.edu/law\_facultyscholarship

Part of the Environmental Law Commons

#### **Recommended Citation**

Eileen Gauna, *LNG Facility Siting and Environmental (In)Justice: Is it Time for a National Siting Scheme?*, 2 Environmental & Energy Law and Policy Journal 85 (2007). Available at: https://digitalrepository.unm.edu/law\_facultyscholarship/75

This Article is brought to you for free and open access by the UNM School of Law at UNM Digital Repository. It has been accepted for inclusion in Faculty Scholarship by an authorized administrator of UNM Digital Repository. For more information, please contact amywinter@unm.edu, Isloane@salud.unm.edu, sarahrk@unm.edu.



SMALL SCHOOL. BIG VALUE.

## ARTICLE

### LNG FACILITY SITING AND ENVIRONMENTAL (IN)JUSTICE: IS IT TIME FOR A NATIONAL SITING SCHEME?

#### Eileen Gauna\*

I. ENVIRONMENTAL JUSTICE: A BRIEF HISTORY	87
A. The Historical Context	87
B. The Siting Context in Particular	89
II. THE LNG INITIATIVE: NIMBY ON A NATIONAL SCALE	100
III. THE ROAD TO A NATIONAL SITING SCHEME—	
SOME EXPLORATORY THOUGHTS	106
IV. CONCLUSION	115

A 1982 siting controversy over a hazardous waste landfill in Warren County, North Carolina is credited with sparking the environmental justice movement in the United States.<sup>1</sup> Against a backdrop of civil demonstrations and over 500 arrests, our national attention was introduced to the phenomena of environmental justice and the unequal environmental burdens borne by communities of color and the poor in the United States.<sup>2</sup>

2. Id.

<sup>\*</sup> Professor of Law, The University of New Mexico School of Law. For continuing support, the author thanks the University of New Mexico School of Law.

<sup>1.</sup> COMM'N FOR RACIAL JUSTICE UNITED CHURCH OF CHRIST, TOXIC WASTES AND RACE IN THE UNITED STATES: A NATIONAL REPORT ON THE RACIAL AND SOCIO-ECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES xi (1987) [hereinafter REPORT ON RACIAL AND SOCIO-ECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES].

More specifically, the issue of siting galvanized the environmental justice movement.<sup>3</sup> Some charged that people-ofcolor communities were intentionally targeted to host polluting and risk-producing facilities and activities.<sup>4</sup> Debates about the cause of disparities in the placement of hazardous waste ensued. Now, more than twenty years later, the United States could well be on the cusp of a similar siting controversy: the siting of liquefied natural gas ("LNG") import terminals.

Currently, there are five constructed LNG facilities in the U.S., but approximately forty terminals are proposed and in various stages of approval and construction in North America.<sup>5</sup> The intense pressure to approve, build, and make these facilities operational in the next few years is matched by equally intense local campaigns to stop the projects.<sup>6</sup> Ultimately, the result of these opposing forces could mean that the majority of the LNG facilities will take the path of least resistance and end up in the Gulf Coast area, which is known to be populated by poor, minority, and already heavily-impacted communities, or near poor and minority communities in other coastal areas.

Article examines the distributional This and other environmental justice issues arising from the current initiative to rapidly site multiple LNG import facilities in order to increase the supply of natural gas into the continental United States. This Article further examines the necessity of creating a national siting scheme to avoid exacerbating existing racial disparities in risk-producing land use practices. The possibility of a national siting scheme raises many of the questions left unanswered by the hazardous waste facility controversies of a decade back and raises new questions concerning federal, state, tribal, and local jurisdiction and control in an era of both increased national security concerns and a push to devolve more authority to state and local governments. There are international environmental justice issues and several dimensions of inequity apparent in the depletion of natural gas reserves in other countries, including

<sup>3.</sup> Id.

<sup>4.</sup> Robert Bullard, Anatomy of Environmental Racism and the Environmental Justice Movement, in CONFRONTING ENVIRONMENTAL RACISM, VOICES FROM THE GRASSROOTS 17 (Robert Bullard Ed., 1993).

<sup>5.</sup> Federal Energy Regulatory Commission, Existing and Proposed North American LNG Terminals, http://www.ferc.gov/industries/lng/indus-act/terminals/ exist-prop-lng.pdf (last visited Apr. 14, 2007) [hereinafter Existing and Proposed North American LNG Terminals].

<sup>6.</sup> Jennifer Weeks, Highly Combustible: Debating the Risks and Benefits of LNG, E/THE ENVIRONMENTAL MAGAZINE, Nov./Dec. 2005 at 1.

generational inequity.<sup>7</sup> However, the scope of this Article is limited to domestic environmental justice issues arising from the rapid siting of multiple import terminals in the United States.

Part I of this paper briefly describes the environmental justice movement, focusing in particular on the siting controversies of hazardous waste facilities. Part II discusses the current political and economic context of the initiative to build new LNG import terminals, and Part III examines the uneasy path toward the development of a national siting scheme as a potential remedy for the foreseeable disparate impact to environmental justice communities.

#### I. ENVIRONMENTAL JUSTICE: A BRIEF HISTORY

#### A. The Historical Context

Environmental justice centers on several related claims: that communities of color and the poor are exposed to more pollution, noxious land uses, and environmental risk than are white, wealthier communities; that these communities receive fewer environmental amenities: that their cultural spaces and sacred sites are the first to be sacrificed at the altar of runaway development; and that these communities-for a variety of reasons-are disadvantaged in the various governmental fora where important environmental decisions are made. For example, activists claim that people of color are disparately impacted by hazardous waste facilities, chemical plants, refineries, power plants, lead smelters, and a variety of manufacturing plants.<sup>8</sup> There are also claimed disparities in exposure to contaminated lands, contaminated aquifers, and contaminated fish caught from unsafe water bodies as well as inordinately high exposures to pesticides (by farm workers), lead (from smelters and old housing stock), air pollution (from facilities, transportation corridors, and truck traffic), and smells (from waste treatment facilities, landfills, and concentrated animal feeding operations), along with noise and light pollution from a variety of intensive industrial practices.<sup>9</sup>

<sup>7.</sup> See, e.g., Emeka Duruigbo, Permanent Sovereignty and Peoples' Ownership of Natural Resources in International Law, 38 GEO. WASH. INT'L L. REV. 33, 61 (2006).

<sup>8.</sup> Bullard, supra note 4, at 10.

<sup>9.</sup> EILEEN GAUNA, CATHERINE A. O'NEILL AND CLIFFORD RECHTSCHAFFEN, CENTER FOR PROGRESSIVE REFORM WHITE PAPER ON ENVIRONMENTAL JUSTICE 1 (2005), *available at* http://www.progressiveregulation.org/articles/EJ\_505.pdf (describing details of an area affected by toxic pollution).

By and large early evidence supported these claims, and recent studies show a strengthening association between race and environmental hazards. For example, in the early 1990s evidence reviewed by the Environmental Protection Agency ("EPA") revealed that racial minorities and the poor experienced higher-than-average exposures to air pollutants, hazardous waste facilities, contaminated fish, and agricultural pesticides.<sup>10</sup> In another review of the then-existing evidence, Professors Bunyan and Mohai concluded that this exposure was not a simple artifact of poverty, but that race was a more statistically significant variable than income.<sup>11</sup> A separate investigation of EPA enforcement patterns found similar results, noting that penalties under hazardous waste laws at sites with the largest white populations were about 500 percent higher than penalties at sites with the largest people-of-color populations.<sup>12</sup> The investigation also found disparities in the cleanup contaminated sites.<sup>13</sup> More recent studies find an increase in these trends, and as explained in the next subsection, the studies in the siting context have become much more sophisticated, pinpointing regional inequities with much greater precision.<sup>14</sup>

These environmental, health, and quality-of-life impacts are not necessarily the result of intentional racial animus; a close examination of laws and regulatory processes point suspiciously to structural problems in various institutional settings. For example, in the environmental regulatory context, commentators have examined how standard setting methodologies, regulatory innovation, siting criteria, and the exercise of enforcement and cleanup discretion of environmental officials systematically tend to generate these types of inequities.<sup>15</sup>

People of color and the poor challenged the practices that led to these conditions, albeit with far fewer resources than the group of regulators, elite environmental organizations, and politically powerful stakeholders that have been the traditional

<sup>10.</sup> U.S. ENVIL. PROT. AGENCY, ENVIRONMENTAL EQUITY: REDUCING RISKS FOR ALL COMMUNITIES 7–13 (1992) [hereinafter REDUCING RISKS FOR ALL COMMUNITIES].

<sup>11.</sup> PAUL MOHAI & BUNYON BRYANT, Environmental Racism: Reviewing the Evidence, in RACE AND THE INCIDENCE OF ENVIRONMENTAL HAZARDS: A TIME FOR DISCOURSE 169 (Paul Mohai & Bunyon Bryant eds., 1992).

<sup>12.</sup> See Marcia Coyle et al., Unequal Protection: The Racial Divide in Environmental Law, NAT'L L.J., Sept. 21, 1992, at S2.

<sup>13.</sup> Id.

<sup>14.</sup> See infra notes 21–38 and accompanying text.

<sup>15.</sup> Mark Atlas, Rush to Judgment: An Empirical Analysis of Environmental Equity in U.S. Environmental Protection Agency Enforcement Actions, 35 LAW & SOCY REV. 1 (2001).

players in the decision-making fora of land use, transportation, environmental, natural resource, and energy regulation. Environmental justice advocates entered the regulatory arena presenting powerful justice claims, and the controversies and consternation they caused entrenched interests will mark a significant turning point in regulatory history.<sup>16</sup> Not only did these activists challenge the status quo, they challenged its supporting assumptions and ideologies and questioned the prevailing normative economic views of this period. They taught us, for example, that environmental regulation is not just about ecosystems and efficiency; it is about public health, quality of life, culture, and fairness as well. As remarkable as this journey has been, progress has been only incremental, and the hard-fought successes remain tenuous. This is particularly evident in the siting context.

#### B. The Siting Context in Particular

Hazardous waste facilities evoke extreme dread. Although cause and effect is impossible to pinpoint with scientific certainty, community residents suspect high rates of illness, rare cancers, miscarriages, birth defects, and deformities in live stock are caused by hazardous waste incinerator emissions or releases of toxic chemicals that migrate through the soil and contaminate nearby surface waters and groundwater aquifers.<sup>17</sup> As mentioned earlier, in 1982, residents in Warren County, North Carolina wondered why their largely African American community was against their consent—becoming host to a large commercial

In particular, several federal initiatives demonstrate the concern with 16. environmental justice issues. The EPA convened a work group within the agency to review the evidence of environmental inequities, a group that reported in 1992. REDUCING RISKS FOR ALL COMMUNITIES, supra note 10, at 2. The following year, the agency then established what eventually came to be called the Office of Environmental Justice and a twenty-five member advisory committee called the National Environmental Justice Advisory Committee. See U.S. Envtl. Prot. Agency, National Environmental Justice Advisory Council, http://www.epa.gov/environmentaljustice/nejac/index.html (last visited Apr. 14, 2007). In 1994, then President Clinton signed the Executive Order on Environmental Justice No. 12898. See Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994) [hereinafter Executive Order No. 12,898]. In 1997, the Council on Environmental Quality issued Environmental Justice NEPA Guidance, and in 1999 the Interagency Workgroup on Environmental Justice was established. See COUNCIL ON ENVIRONMENTAL QUALITY, ENVIRONMENTAL JUSTICE: GUIDANCE UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT 3 (1997), available at http://www.nepa.gov/nepa/regs/ej/justice.pdf [hereinafter GUIDANCE UNDER NEPA]; U.S. Envtl. Prot. Agency, Interagency Working Group, http://www.epa.gov/ environmentaljustice/interagency/index.html (last visited Apr. 14, 2007).

<sup>17.</sup> See, e.g., Rob Cedar, Incinerators Cost Detroit Money, Clean Air, DETROIT NEWS, Aug. 28, 2002, at 07S.

polychlorinated biphenyls ("PCB") waste facility.<sup>18</sup> A high profile demonstration about the landfill resulted in the arrest of several prominent individuals, including Congressman Walter Fauntroy, Dr. Joseph Lowery, president of the Southern Christian Leadership Conference, and Dr. Benjamin Chavis, then executive director of the United Church of Christ Commission for Racial Justice.<sup>19</sup> The PCB landfill was sited anyway, but the event did lead to a more systematic inquiry of inequitable siting.<sup>20</sup> Subsequently, in 1983, the General Accounting Office<sup>21</sup> undertook a study of EPA Region 4 at the request of Congressman Fauntroy and found that three of the four large commercial hazardous waste facilities in the region were located in African American communities, although African Americans comprised only onefifth of the region's population.<sup>22</sup> The United Church of Christ Commission for Racial Justice undertook a national examination and concluded that there was a statistically significant relationship between race and the prevalence of hazardous waste facilities and uncontrolled waste sites.<sup>23</sup> These reports marked

Demographic Characteristics of Communities with Commercial Hazardous Waste Facilities

- Race proved to be the most significant among variables tested in association with the location of commercial hazardous waste facilities. This represented a consistent national pattern.

<sup>18.</sup> Charles Lee, Beyond Toxic Waste and Race, in CONFRONTING ENVIRONMENTAL RACISM 43 (Robert D. Bullard ed., 1993). PCBs are mixtures of man-made chemicals with similar chemical structures. Concerns about PCB relate to its toxicity and persistence in the environment. See U.S. Envtl. Prot. Agency, Prevention Pesticides and Toxic Substances, Polychlorinated Biphenyls, http://www.epa.gov/pcb/ (last visited Apr. 14, 2007).

<sup>19.</sup> History of Environmental Timeline, http://www.personal.kent.edu/~embobi/ environmentaltimeline.htm (last visited Apr. 25, 2007).

<sup>20.</sup> GEN. ACCOUNT. OFFICE, SITING OF HAZARDOUS WASTE LANDFILLS AND THEIR CORRELATION WITH RACIAL AND ECONOMIC STATUS OF SURROUNDING COMMUNITIES 1–7 (1983).

<sup>21.</sup> This office was renamed the Government Accountability Office in 1994. See About GAO, GAO Name, http://www.gao.gov/about/namechange.html (last visited Apr. 14, 2007).

<sup>22.</sup> GEN. ACCOUNT. OFFICE, supra note 20, at 1-7.

<sup>23.</sup> REPORT ON RACIAL AND SOCIO-ECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES, *supra* note 1, at ix-x. The following is a summary of the Report's major findings:

<sup>-</sup> Communities with the greatest number of commercial hazardous waste facilities had the highest composition of racial and ethnic residents. In communities with two or more facilities or one of the nation's five largest landfills, the average minority percentage of the population was more than three times that of communities without facilities (38% versus 12%).

<sup>-</sup> In communities with one commercial hazardous waste facility, the average

the beginning of a vigorous debate about both methodology, in particular issues concerning the appropriate unit of analysis,<sup>24</sup>

- Three out of the five largest commercial hazardous waste landfills in the United States were located in predominantly Black or Hispanic communities. These three landfills accounted for forty percent of the total estimated commercial landfill capacity in the nation.

Demographic Characteristics of Communities with Uncontrolled Toxic Waste Sites.

- Three out of every five Black and Hispanic Americans lived in communities with uncontrolled toxic waste sites.

- More than 15 million Blacks lived in communities with one or more uncontrolled toxic waste sites.

- More than 8 million Hispanics lived in communities with one or more uncontrolled toxic waste sites.

- Blacks were heavily over-represented in the populations of metropolitan areas with the largest number of uncontrolled toxic waste sites. These areas include: Memphis, TN (173 sites); St. Louis, MO (160 sites); Houston, TX (152 sites); Cleveland, OH (106 sites); Chicago, IL (103 sites); Atlanta, GA (94 sites).

- Los Angeles, California had more Hispanics living in communities with uncontrolled toxic waste sites than any other metropolitan area in the United States.

- Approximately half of all Asian/Pacific Islanders and American Indians lived in communities with uncontrolled toxic waste sites.

- Overall, the presence of uncontrolled toxic waste sites was highly pervasive. More than half of the total population in the United States resided in communities with uncontrolled toxic waste sites.

Id. at xiii-xiv (footnotes omitted).

24. One significant methodological debate concerned the unit of analysis. The unit of analysis used by researchers can include zip codes, census tracts, concentric circles around a facility, or other geographic areas. Christopher Boerner criticized using zip codes as the unit of analysis (as used in the United Church of Christ Study), noting that zip codes "are frequently large units established by the U.S. Postal Service. As a result, the data likely suffer from what statisticians call 'aggregation errors.' That is to say, the studies reach conclusions from the zip-code data which would not be valid if a smaller, more consistent geographic unit were examined...." Christopher Boerner, *Environmental Injustice*, PUB. INTEREST, Winter 1995, at 3. Professor Vicki Been and Francis Gupta used census tract data, although they acknowledged that this unit of analysis has its limitations:

While census tracts were the most appropriate unit of analysis for this study, they are far from the ideal. Any proximity-based unit of analysis assumes that the risk a facility poses bears some relationship to proximity to the facility, an assumption that may be inaccurate in many cases. A better unit of analysis would be one based upon the actual distribution of the risks of the facility, which

minority percentage of the population was twice the average minority percentage of the population in communities without such facilities (24% versus 12%).

<sup>-</sup> Although socio-economic status appeared to play an important role in the location of commercial hazardous waste facilities, race still proved to be more significant. This remained true after the study controlled for urbanization and regional differences. Incomes and home values were substantially lower when communities with commercial facilities were compared to communities in the surrounding counties without facilities.

#### and the appropriate comparison population.<sup>25</sup>

would further depend upon the type of substances the facility handled, wind patterns, the hydrology and geology of the site, and transportation routes to the facility, among other factors. That analysis is extremely difficult and costly, however, and was impractical for a study of this scope.

Further, all proximity-based units of analysis assume that the impact of the facility is primarily felt within the host unit. Our perusal of many census tract maps revealed, however, that facilities often are located at the edges of tracts.... Depending upon wind patterns and other factors, a facility located at the border of a tract might have little or no impact on that tract, but considerable impact on adjacent tracts. Data and time constraints precluded us from analyzing the demographics of areas adjacent to the host tracts, but other researchers may wish to pursue that inquiry....

Vicki Been & Francis Gupta, Coming to the Nuisance or Going to the Barrios? A Longitudinal Analysis of Environmental Justice Claims, 24 ECOLOGY L.Q. 1, 12–13 (1997). Professor Robert Bullard notes that a disadvantage of using census tracts as a unit of analysis is that this assumes census tracts represent homogeneous neighborhoods. In fact, pockets of minority neighborhoods may be embedded within otherwise majority tracts, and these pockets may host polluting facilities. His pioneering research in Houston relied on neighborhoods as units of analysis. "Neighborhoods are spatial units where people have social and cultural attachments. These attachments may cross geographic and political boundaries of census tracts and zip codes. Residents often define and defend their neighborhood along racial, ethnic, economic, and religious lines." Robert Bullard, Environmental Justice: It's More Than Waste Facility Siting, 77 Soc. Sci. Q. 493 (1996). Professor Paul Mohai describes other limitations of using census tracts:

[T]he limitations of units of analysis that are too small can be overcome, at least partially, by using such units as "building blocks" to approximate the area of impact, and by comparing the demographics of the impacted areas with the demographics outside those areas.... Many [other] improvements could be made in the methods of approximating the impacted area. As noted, a number of studies have already used radii of fixed distances to approximate the areas of impact [i.e. looking at the impacts within a 2.5 mile radius of the facility]. Such an approach has the advantage of standardizing the size and shape of geographic units and of ensuring that the locally unwanted land use or potential source of pollution is always at the center.... Additional approaches might include an initial approximation of the area of potential impact by examining, for instance, property values, surveys of residents, and health data (if available) followed by a comparison of the demographics inside and outside those areas. In addition, community leaders, neighborhood residents, and corporate and government decision makers could be surveyed to help identify distinct neighborhoods and communities with a common stake. Demographics and various environmental quality indicators could be examined in those areas and compared with those elsewhere.

Paul Mohai, The Demographics of Dumping Revisited: Examining the Impact of Alternate Methodologies in Environmental Justice Research, 14 VA. ENVTL. L. J. 615, 650–51 (1995). For a detailed recent evaluation of which units of analysis are most appropriate to use see Duane A. Gill et al., Units of Analysis and the Environmental Justice Hypothesis: The Case of Industrial Hog Farms, 83 SOC. SCI. Q. 298 (2002). The authors propose a methodology for determining "community," which they argue is the most desirable unit of analysis. Id.

25. This issue revolved around the appropriate comparison or control population, i.e. the base population against which the demographics of host communities are measured. For example, should the comparison population be all areas of the country, the state, or a metropolitan area? The rationale offered by researchers for the Social and

92

Another vigorously debated issue was causation.<sup>26</sup> After Dr. the politically-charged Beniamin Chavis used term "environmental racism" to describe the racially disparate location of communities of color near hazardous waste facilities, some took that to suggest that there was intentional racial discrimination in the siting of these facilities.<sup>27</sup> While that was an accurate belief in many cases, a more nuanced theory of causation was also applicable-one pointing to a combination of intentional discrimination, historical discriminatory land use practices, and structural inequities in the decision-making processes.<sup>28</sup> Some commentators questioned this discriminatory siting theory, asserting that the evidence merely established that presently there was a disparity in the location of hazardous waste facilities and communities of color, but that this fact alone did not establish whether disparity existed at the time the

While SADRI is correct that some non-host tracts may not be viable candidates for hosting a TSDF, the presence or absence of a facility within a metropolitan area or rural county is, at the very best, an extremely rough proxy for whatever factors are likely to go into the decision to eliminate certain areas from consideration. TSDFs range from huge landfills to small treatment facilities. They vary considerably in the amount of land, the hydrological and geological characteristics of that land, the type of workforce, and the access to transportation networks that they need. Some serve national markets; others have more limited client bases. The ideal study of the siting of TSDFs would include a model of how facilities are sited, and exclude areas from the analysis on the basis of that model. Until that model is developed, however, we believe that the appropriate comparison group should include all non-host tracts....

Been & Gupta, *supra* note 24, at 16–17. In their study, Been & Gupta followed the methodology of the United Church of Christ study, using the entire United States as the comparison population. Other studies also highlight the significant differences that result from using different control populations. Been's research, for example, found that within a metropolitan area there was little difference between the median family incomes in host and nonhost tracts, although there were significant differences when using a national average of income in nonhost tracts. She argued that this points to a possible injustice in "the placement of [locally undesirable land uses] LULUs within metropolitan areas instead of in more rural areas or in smaller cities outside metropolitan areas, rather than in the placement of LULUs within the host city itself." Vicki Been, *Analyzing Evidence of Environmental Justice*, 11 J. LAND USE & ENVIL. L. 1, 16 (1995).

26. Been & Gupta, supra note 24, at 21.

27. Environmental racism is simply racial discrimination in environmental policy making. Lynn Norment, *Ben Chavis: A New Director, A New Direction at the NAACP*, EBONY (July 1993) (describing Chavis' now-famous use of the term and the meaning behind it), *available at* http://www.findarticles.com/p/articles/mi\_m1077/ is\_n9\_v48/ai\_13947854.

28. Been & Gupta, supra note 24, at 22–25.

Demographic Research Institute ("SADRI") for limiting their study to metropolitan areas only, (and hence finding little evidence of racial disparities), is their assumption that tracts with no commercial waste sites were infeasible for treatment/storage/disposal facilities ("TSDFs"). Vicki Been and Francis Gupta, noted that this methodology eliminated about 18,000 nonhost tracts from SADRI's analysis of 1990 census data:

facilities were initially sited. As Professor Vicki Been and others suggested, the facilities could have been sited in a racially neutral manner and without resulting disparities.<sup>29</sup> However, once these facilities were sited, land prices declined and those with more resources and thus not subject to the limitations of existing discrimination in the housing market, i.e., wealthier white persons, moved from these locales.<sup>30</sup> Those with fewer housing choices, i.e., the poor and people of color, moved in.<sup>31</sup> Thus, the neutrality of siting patterns would be undone by simple market dynamics, and attention and resources devoted to showing a supposedly-discriminatory siting process would be wasted if there was no or little discrimination to begin with.

Professor Been set out to test her market dynamics theory in a longitudinal examination of 544 existing commercial hazardous waste facilities.<sup>32</sup> Ultimately, her research revealed little evidence of post-siting market dynamics.<sup>33</sup> Nor did she find any statistically significant evidence of disproportionate siting of these facilities in African-American communities.<sup>34</sup> However, her research did establish a statistically significant correlation of disparate siting in Hispanic communities.<sup>35</sup> This study presented a conundrum: if there was no significant evidence of disparities in siting these facilities in African-American communities, and no significant evidence of post-siting movement of African Americans to locations near hazardous waste communities, what accounted for the existing disparity of hazardous waste facilities in African-American communities?

The answer to that question seems to lie in the limitations of the study itself. Some of the facilities were sited prior to 1970, the earliest date for which Professor Been was able to obtain reliable census data on the demographics of the surrounding communities.<sup>36</sup> In short, the evidence suggested disparities in

36. She noted that of the hazardous waste facilities with a Resource Conservation and Recovery Act ("RCRA") permit in 1987, sixty percent of on-site treatment, storage and disposal facilities (those which handle only their own wastes) and limited commercial facilities (those which primarily handle their own wastes but may accept some wastes from other companies), and one-third of commercial TSDFs (facilities that handle wastes generated by other facilities for a fee) were sited before 1970. James T. Hamilton, *Testing* for Environmental Racism: Prejudice, Profits, Political Power?, 14 J. POL'Y ANALYSIS &

<sup>29.</sup> Id. at 34.

<sup>30.</sup> Id. at 6-7.

<sup>31.</sup> *Id.* 

<sup>32.</sup> Id. at 9.

<sup>33.</sup> Been & Gupta, *supra* note 24, at 16–17.

<sup>34.</sup> Id. at 17.

<sup>35.</sup> Id.

siting hazardous waste facilities in Hispanic communities, inconclusive evidence of siting disparities—or the lack thereof—in African-American communities, and no evidence of post-siting minority move-in.<sup>37</sup>

While the academic debates about methodology and causation raged on, environmental justice activists used community organization, direct action, and litigation to attempt to remedy siting disparities. For example, there were community-based campaigns against proposed hazardous waste incinerators in Alston, Louisiana, Los Angeles, California, and Kettleman City, California; campaigns against lead smelters in Dallas, Texas; and campaigns against solid waste landfills and incinerators in Houston, Texas, Rosebud, South Dakota, and Los Angeles, California, respectively.<sup>38</sup> Activists and community members took their concerns to court with lawsuits claiming violations of the U.S. Constitution's Equal Protection Clause, Title VI of the Civil Rights Act, and violations of various environmental laws.

Although in several cases in the mid-1980s courts inferred discriminatory intent and found violations of the Equal Protection Clause based on the disparate provision of municipal services.<sup>39</sup> equal protection claims in the environmental justice context were not as successful. In a trio of cases, <sup>40</sup> courts found insufficient circumstantial or statistical evidence of discriminatory intent, despite compelling circumstances.<sup>41</sup> However, as disappointing as these opinions were for environmental justice advocates, Professor Alice Kaswan argued that "a wholesale abandonment of the equal protection approach

95

МGMT. 107, 120 (1995).

<sup>37.</sup> Been & Gupta, *supra* note 24, at 33–34.

<sup>38.</sup> Bullard, supra note 4, at 28.

<sup>39.</sup> See, e.g., Dowdell v. City of Apopka, 698 F.2d 1181 (11th Cir. 1983) (noting disparate municipal services such as water hookups, street paving, and storm-sewer capacity to minority residents).

<sup>40.</sup> Bean v. S.W. Waste Mgmt. Corp., 482 F. Supp. 673 (S.D. Tex. 1979), aff'd without opinion, 780 F.2d 1038 (5th Cir. 1986); E. Bibb Twiggs Neighborhood Ass'n v. Macon-Bibb County Planning & Zoning Comm'n, 706 F. Supp. 880 (M.D. Ga. 1989); R.I.S.E., Inc. v. Kay, 768 F. Supp. 1144 (E.D. Va. 1991).

<sup>41.</sup> According to plaintiffs' appellate brief in *R.I.S.E.*, for example, the County Administrator, after hearing the concerns about the landfill expressed by two African-American ministers, told another party that the ministers "should be given a one-way ticket back to Africa." Another white member of the supervisors referred to the "niggers" opposition to the landfill. See Robert Collin, *Environmental Equity:* A Law and Planning Approach to Environmental Racism, 11 VA. ENVTL. L.J. 495, 532 (1992).

[was] premature."42 She contended that "[allthough the environmental [equal protection] cases confirm that the evidentiary burden for proving intentional discrimination is high. and the willingness of the courts to infer discrimination is low. the constitutional remedy should not be dismissed out of hand."43 She further argued that the inquiry is highly fact-specific, and that while most cases may not be amenable to an equal protection claim, courts should evaluate the facts of each case to determine whether they present the kind of evidence considered probative under the demanding Arlington Heights test.<sup>44</sup> Indeed. in 2002, a federal district court in Texas found enough circumstantial evidence of discriminatory intent in an environmental-justice related equal protection claim to defeat summary judgment for the defendants.<sup>45</sup> Thus, although difficult to prove in the siting context, equal protection cases still present a viable remedy for impacted communities.

Residents of affected areas have brought far more claims under the civil rights laws. In particular, claims have been brought under Title VI of the Civil Rights Act, a law that prohibits recipients of federal funds from using those funds in discriminatory ways.<sup>46</sup> Many of these claims target the criteria and methods used by state environmental regulatory agencies that cause or exacerbate racial disparities by allowing permits to construct and operate polluting facilities in heavily-impacted

<sup>42.</sup> Alice Kaswan, Environmental Laws: Grist for the Equal Protection Mill, 70 U. COLO. L. REV. 387, 456 (1999); see also Collin, supra note 41, at 534; Peter L. Reich, Greening the Ghetto: A Theory of Environmental Race Discrimination, 41 U. KAN. L. REV. 271, 287 (1992); Robert M. Frye, Environmental Injustice: The Failure of American Civil Rights and Environmental Law to Provide Equal Protection From Pollution, 3 DICK. J. ENVTL. L. & POL'Y 53 (1993); Rodolfo Mata, Inequitable Siting of Undesirable Facilities and the Myth of Equal Protection, 13 B.C. THIRD WORLD L.J. 233 (1993); Edward Patrick Boyle, It's Not Easy Bein' Green: The Psychology of Racism, Environmental Discrimination, and the Argument for Modernizing Equal Protection Analysis, 46 VAND. L. REV. 937 (1993); Donna Gareis-Smith, Environmental Racism: The Failure of Equal Protection to Provide a Judicial Remedy and the Potential of Title VI of the 1964 Civil Rights Act, 13 TEMP. ENVTL. L. & TECH. J. 57 (1994); Jill E. Evans, Challenging the Racism in Environmental Racism: Redefining the Concept of Intent, 40 ARIZ. L. REV. 1219, 1269-70 (1998).

<sup>43.</sup> Kaswan, supra note, at 433-34.

<sup>44.</sup> Id. at 456. Arlington Heights requires discriminatory intent to invalidate zoning actions with racially disparate impacts. See Vill. of Arlington Heights v. Metro. Hous. Dev. Corp., 429 U.S. 252 (1977).

<sup>45.</sup> Miller v. City of Dallas, No. 3:98-CV-2955-D, 2002 WL 230834, at \*9 (N.D. Tex. Feb. 14, 2002).

<sup>46. 42</sup> U.S.C. § 2000d (2000); U.S. EPA, Office of Civil Rights, http://www.epa.gov/ocr/ (last visited Apr. 14, 2007).

minority communities.<sup>47</sup> The EPA Office of Civil Rights, the funding agency for many state environmental regulatory agencies, has responsibility for adjudicating many of these claims.<sup>48</sup> In the early-to-mid 1990s, these cases looked to be fruitful, and impacted parties began to formally complain. Industry, municipal, and state stakeholders became alarmed about the siting implications.<sup>49</sup> If permits in highly-impacted areas could not be issued without exacerbating racial disparities, then where would these high-risk industrial facilities be sited? Project sponsors were sure to encounter significant local opposition if they located near wealthier, residential areas. So great was the pressure on the EPA, especially after it issued interim guidance for investigating Title VI complaints,<sup>50</sup> that a high-profile multi-stakeholder federal advisory committee was established to examine ways states might comply with Title VI.<sup>51</sup> The political pressure reached its zenith when, in 2000, Congress inserted a rider in an appropriations bill precluding the EPA from using any of the appropriated funds to investigate Title VI complaints.52

Much of the consternation over Title VI, and hence much of the agency activity came to a halt in 2001, when the U.S. Supreme Court ruled that there was no private right of action under the section 602 promulgated "disparate impact" regulations.<sup>53</sup> This decision left an administrative investigation as the only remedy. As of 2005, there had been over 172 administrative claims filed with the EPA.<sup>54</sup> The agency has investigated and settled a handful of these claims, but to date,

50. U.S. ENVTL. PROT. AGENCY, INTERIM GUIDANCE FOR INVESTIGATING TITLE VI ADMINISTRATIVE COMPLAINTS CHALLENGING PERMITS 1 (1998), *available at* http://www.epa.gov/civilrights/docs/interim.pdf.

<sup>47.</sup> See generally U.S. ENVTL. PROT. AGENCY, TITLE VI COMPLAINTS FILED WITH EPA (2005), available at http://www.epa.gov/civilrights/docs/t6csdec05.pdf.

<sup>48.</sup> Id. at 1.

<sup>49.</sup> For a good discussion of industry concerns, see e.g., NATIONAL ADVISORY COUNCIL FOR ENVIRONMENTAL POLICY AND TECHNOLOGY, REPORT OF THE TITLE VI IMPLEMENTATION ADVISORY COMMITTEE: NEXT STEPS FOR EPA, STATE, AND LOCAL ENVIRONMENTAL JUSTICE PROGRAMS (1999) [hereinafter REPORT ON THE TITLE VI IMPLEMENTATION ADVISORY COMMITTEE], available at http://www.epa.gov/ ocem/nacept/titleVI/titlerpt.html.

<sup>51.</sup> Report on the Title VI Implementation Advisory Committee, supra note 49.

<sup>52.</sup> United States Housing Act, Pub. L. No. 106-74 § 225, 113 Stat. 1047, 1081 (1999).

<sup>53.</sup> Alexander v. Sandoval, 532 U.S. 57 (2001).

<sup>54.</sup> U.S. ENVTL. PROT. AGENCY, STATUS SUMMARY TABLE OF EPA TITLE VI ADMINISTRATIVE COMPLAINTS 1 (2005), *available at* http://www.epa.gov/civilrights/ docs/t6stdec2005.pdf.

the EPA has not had occasion to make even one adjudication of an adverse disparate impact on any of the claims.<sup>55</sup> In light of the overwhelming empirical evidence of disparity, this is surprising. It might be that the agency's failure to administratively find a disparate impact has less to do with environmental conditions and more to do with the consequences of finding a disparate impact, i.e., the "nuclear option" remedy under Title VI. This remedy provides that if the agency were to find a violation of disparate impact regulations, federal funding would be withdrawn from the state program.<sup>56</sup> This would likely require the EPA to take over the associated state permitting program, a move that has significant political and resource ramifications. As explained recently, "[i]f states operating delegated federal programs fail to meet minimum federal standards, EPA has the authority to withdraw the delegation, but this authority is virtually never exercised because the Agency is loathe to take over operation of state programs without receiving additional resources."<sup>57</sup> Another less drastic remedy would be for the agency to refer the matter to the Department of Justice to seek an injunction on behalf of the EPA. However, the agency has yet to pursue this option.

While equal protection and Title VI cases have been a disappointment to many, cases brought under the environmental statutes themselves have enjoyed more success. For example, in Louisiana a group of students from the Tulane law clinic instituted a lawsuit challenging a project sponsor's application for Clean Air Act preconstruction and operating permits to build a chemical manufacturing plant.<sup>58</sup> The clinic's clients were citizens living in the low-income, eighty-four percent African-American, industrial corridor town of Convent, in St. James Parish.<sup>59</sup> The proposed petrochemical firm, owned by Shintech Corporation, planned to manufacture vinyl chloride resulting in emissions of over three million pounds of air pollutants per year,

<sup>55.</sup> Id.

<sup>56. 40</sup> C.F.R. § 7.130.

<sup>57.</sup> See generally PERCIVAL, SCHROEDER, MILLER & LEAPE, ENVIRONMENTAL REGULATION, LAW, SCIENCE, AND POLICY, 957 (5th ed. 2006) (discussing EPA's hesitancy to withdraw delegations for failure to meet minimum state standards without receiving additional resources).

<sup>58.</sup> U.S. ENVTL. PROT. AGENCY, ORDER PARTIALLY GRANTING AND PARTIALLY DENYING PETITIONS FOR OBJECTION TO PERMITS (1997) (responding to requests that Administrator object to Shintech, Inc.'s permits 2466-VO, 2467-VO, and 2468-VO), *available at* http://www.leanweb.org/Shintech/shinres.pdf.

<sup>59.</sup> Robert R. Kuehn, *The 'Justice' in Environmental Justice*, 1 MISCELLANEOUS PUBL'NS OF THE LOY. U. N. ORLEANS CTR. FOR ENVTL. COMMC'NS 15, 17 (2002).

including close to 700,000 pounds of toxic air pollutants.60 Shintech planned to locate the plant in an area where toxic air emissions exceeded 16 million tons annually and, on a persquare-mile basis, were 129 times higher than the statewide average and 658 times higher than the national average.<sup>61</sup> Ultimately, as a result of administrative appeals filed by the clinic, the EPA vetoed the state's proposed air permit for the facility and, incidentally, accepted the citizens' Title VI civil rights complaint for investigation.<sup>62</sup> Shintech eventually dropped its plans to site the facility in St. James Parish and built a smaller facility elsewhere in the state.<sup>63</sup> In another successful environmental statute case in Kettleman City, California, residents successfully challenged the environmental impact report issued under the California Environmental Quality Act for a proposed hazardous waste incinerator.<sup>64</sup> Additionally, when facilities have already been sited, citizens in impacted communities are increasingly turning to the use of the citizen suit provisions of the environmental statutes to enforce compliance.65

As this brief history demonstrates, citizens in heavily impacted communities are wary, and they understandably object to the siting of new polluting facilities that will add to the cumulative impacts already experienced in these areas. While some legal theories have fallen short of promised remedies, citizen activists have learned a great deal in the last fifteen to twenty years. They are still willing to make their concerns heard in participatory avenues and to pursue claims in court when they feel it necessary. They respond aggressively to siting and permitting processes perceived (accurately so in most cases) to be unfair and that will foreseeably generate or exacerbate racial disparities. How the environmental justice movement will

63. Id.

64. Craig Anthony Arnold, Planning Milagros: Environmental Justice and Land Use Regulation, 76 DENV. U. L. REV. 1, 35 (1998).

<sup>60.</sup> Id. at 17.

<sup>61.</sup> Id.

<sup>62.</sup> Although the EPA Office of Civil Rights ("OCR") met several times with the complainants, Shintech representatives, and others, OCR has not drawn any conclusions in the investigation. U.S. ENVTL. AGENCY, COMPLAINT FILE NO. 4R-97-R6, SUMMARY OF TITLE VI COMPLAINT AND INVESTIGATION REGARDING ISSUANCE OF PERMIT FOR PROPOSED SHINTECH ST. JAMES PARISH FACILITY 1 (July 13, 1999), available at http://www.epa.gov/ocr/docs/shinsum1.pdf.

<sup>65.</sup> See, e.g., Eileen Gauna, Federal Environmental Citizen Provisions, Obstacles and Incentives on the Road to Environmental Justice, 22 ECOL. L.Q. 1 (1995) (exploring the potential of citizen suits to address compliance issues in highly impacted communities).

respond, either collectively or through individual campaigns, to the initiative to site multiple LNG facilities remains to be seen. However, when examining the political and economic context of the multiple proposed sites, the conditions are ripe for significant clashes at various points in regulatory venues.

#### II. THE LNG INITIATIVE: NIMBY ON A NATIONAL SCALE<sup>66</sup>

In 2003, U.S Federal Reserve Chairman Alan Greenspan drew national attention to the dwindling supply of domestic natural gas and called for measures to increase LNG imports into the U.S.<sup>67</sup> American petroleum statistics report that existing wellheads are currently depleted by twenty-nine percent annually while demand is rising two percent annually.<sup>68</sup> Over time, demand is expected to rise dramatically from 22.8 trillion cubic feet ("tcf") in 2003 to 33.8 tcf in 2020.<sup>69</sup> At this point, there are four LNG import terminals in the continental U.S. located at Cove Point, Maryland; Elba Island, Georgia; Lake Charles, Louisiana; and Everett, Massachusetts.<sup>70</sup>

LNG is natural gas that is cooled to below -260 degrees Fahrenheit, at which point it becomes a "boiling cryogen."<sup>71</sup> It reduces to about 1/600th of its volume as a gas and weighs about forty-five percent less than water.<sup>72</sup> In this form, it is ideal for transport by supertanker from countries like Trinidad, Algeria, and Nigeria—countries that currently supply LNG to the United States.<sup>73</sup> LNG is re-gasified when warmed and can be shipped

<sup>66.</sup> The commonly-used acronym, NIMBY, stands for "not in my back yard."

<sup>67.</sup> Natural Gas Supply and Demand Issues, Hearing Before the Comm. on Energy and Commerce, 108th Cong. 1 (2003) (statement of the Fed. Reserve Bd. Chairman Alan Greenspan), available at http://www.federalreserve.gov/boarddocs/testimony/ 2003/20030610/default.htm; see also Inst. for the Analysis of Global Sec., Energy Security and Liquefied Natural Gas, ENERGY SECURITY J., Sept. 29, 2003, http://www.iags.org/n0929034.htm [hereinafter Energy Security and Liquefied Natural Gas].

<sup>68.</sup> Energy Security and Liquefied Natural Gas, supra note 67.

<sup>69.</sup> Id.

<sup>70.</sup> Michael A. Stosser & Michael G. Andrea, *Meeting the Increased Demand for Liquefied Natural Gas*, 19 NAT. RESOURCES & ENV'T 30 (2005), *available at* http://www.hewm.com/docs/en/stosser\_andrea\_liquefied\_natural\_gas.pdf.

<sup>71.</sup> MICHELLE MICHOT FOSS, BUREAU OF ECON. GEOLOGY, LNG SAFETY AND SECURITY 49 (2003) *available at* http://www.beg.utexas.edu/energyecon/lng/documents/CEE\_LNG\_Safety\_and\_Security.pdf.

<sup>72.</sup> Id. at 44.

<sup>73.</sup> Algeria was the biggest exporter of LNG to the United States, but since the mid-1990s, Trinidad and Tobago are the largest suppliers. Qatar, Nigeria, Oman and Malaysia have also supplied LNG to the United States as well. Stosser & Andrea, *supra* note 70.

either through the existing natural gas pipeline structure or by vehicle.<sup>74</sup> Proponents of a LNG supply increase note that it is odorless, noncorrosive, nontoxic, and nonexplosive except under certain conditions.<sup>75</sup> However, many are not as optimistic about the safety of LNG.<sup>76</sup> They note that LNG can spread quickly, especially over water.<sup>77</sup> When released into the environment, within minutes it re-gasifies into a vapor cloud.<sup>78</sup> An ignition source can ignite the cloud at five to fifteen percent concentration in the air.<sup>79</sup> The resulting fireball will burn inward and cannot be extinguished until all of the gas is consumed.<sup>80</sup>

In the past, issues relating to LNG safety primarily focused on operator error or accidental leakage from storage and processing facilities.<sup>81</sup> However, in the wake of the September 11, 2001 attack on the World Trade Center towers, there is increased concern that tankers, import terminals, storage tanks, and regasification facilities will become prime targets for terrorist attacks.<sup>82</sup> So immediate was this concern that on September 27, 2001, a LNG tanker was denied entry into the Boston Harbor for a regularly scheduled delivery.<sup>83</sup> Shipments resumed, but not without the U.S. Coast Guard's heavy guard of fast escort boats and a security zone extending 500 yards on each side, two miles ahead, and a mile behind the tanker during its passage to port.<sup>84</sup> To this date, Bostonians remain skeptical and concerned,<sup>86</sup> as do

77. PARFOMAK & FLYNN, supra note 76.

- 79. See id.
- 80. Id.

- 82. Id.
- 83. Id.

<sup>74.</sup> Id.; see also FOSS, supra note 71, at 24.

<sup>75.</sup> FOSS, *supra* note 71, at 13.

<sup>76.</sup> Reports by consultants concerning the safety of LNG include PARFOMAK & AARON M. FLYNN, PAUL W. CONG. RESEARCH SERV., LIQUEFIED NATURAL GAS (LNG) IMPORT **TERMINALS:** SITING, SAFETY AND REGULATION 1 (2004), available at http://www.wildcalifornia.org/ cgi-files/0/pdfs/1078177225\_LNG\_Ignites\_Controversy\_CRS\_Report\_to\_Congress\_LNG\_Jan\_04.pdf; SANDIA NAT'L LAB., GUIDANCE ON RISK ANALYSIS AND SAFETY IMPLICATIONS OF LARGE LIQUEFIED NATURAL GAS (LNG) SPILL OVER WATER 1 (2004), available at http://www.fossil.energy.gov/programs/oilgas/storage/lng/sandia\_lng\_1204.pdf; ASPEN ENVIL. GROUP, INTERNATIONAL AND NATIONAL EFFORTS TO ADDRESS THE SAFETY AND SECURITY RISKS OF IMPORTING LIQUEFIED NATURAL GAS: A COMPENDIUM 1 (2005), available at http://www.energy.ca.gov/2005publications/CEC-600-2005-002/ CEC-600-2005-002.PDF.

<sup>78.</sup> See id.

<sup>81.</sup> Energy Security and Liquefied Natural Gas, supra note 67.

<sup>84.</sup> Inst. for the Analysis of Global Sec., *Study: LNG—Not in My Backyard*, ENERGY SECURITY J., Jan. 21, 2004, http://www.iags.org/n0121041.htm.

<sup>85.</sup> See Carolyn Y. Johnson, Safety Tops Concern on LNG Terminal,

other communities slated to host LNG terminals.<sup>86</sup>

Terrorism is not the only concern. For example, there may also be spilling due to a collision with a LNG terminal. A near miss occurred at the Elba Island Terminal in September of 2000.<sup>87</sup> A 580-foot tanker filled with palm and coconut oil lost its steering and slammed into the terminal's dock, putting a fortyfoot gash in the tanker and wrecking almost half of the dock.<sup>88</sup> Luckily, the terminal had no LNG present at the time of the collision.<sup>89</sup>

In addition to the concern with accidents at port, there are other significant risks with LNG facilities. Even without the contemporary preoccupation with terrorist attacks, there is a legitimate basis for concern. Two tragic accidents have already occurred. In 1944 at a LNG facility in Cleveland, Ohio, a leaking tank exploded, killing 131 people and injuring many others.<sup>90</sup> Recently, in 2004, a LNG processing plant in Algeria exploded, killing twenty-seven people and injuring many others.<sup>91</sup> Pictures and footage from these incidents are being extensively used by anti-LNG campaigns in the U.S., as well as on recent news programs.<sup>92</sup> In addition to accidents at facilities and intentional terrorism, there are concerns in some parts of the country about the effect of earthquakes and hurricanes on these facilities, as well as accidents to transporting vehicles and pipeline rupture.<sup>93</sup>

The LNG supertankers at sea are also vulnerable. Most of these tankers operate under foreign flags and with lean crews. Although the risk of terrorists taking control on board was previously thought to be slight because of the assumption that

BOSTON GLOBE, Oct. 9, 2005, at S1.

<sup>86.</sup> James A. Fay, *Is LNG Safe?*, http://alum.mit.edu/ne/whatmatters/200510/ index.html (last visited Apr. 14, 2007). James Fay is professor emeritus of mechanical engineering at MIT and was chairman of the Massachusetts Port Authority and Air Pollution Control Commission for the City of Boston. He is currently a director emeritus of the Union of Concerned Scientists.

<sup>87.</sup> ASPEN ENVTL. GROUP, supra note 76, at 35.

<sup>88.</sup> Id.

<sup>89.</sup> Id.

<sup>90.</sup> NewsHour with Jim Lehrer: Importing Liquefied Natural Gas, (PBS television broadcast Dec. 6, 2005), available at http://www.pbs.org/newshour/bb/environment/july-dec05/gas\_12-6.html.

<sup>91.</sup> *Id*.

<sup>92.</sup> Id.

<sup>93.</sup> See, e.g., ASPEN ENVTL. GROUP, supra note 76, at 41; see also Institute for the Analysis of Global Security, Threats to Oil Transport, http://www.iags.org/oiltransport.html (showing rupture of the trans-Alaska pipeline spurting oil following a gunshot in October of 2001) (last visited Apr. 14, 2007) [hereinafter Threats to Oil Transport].

terrorists had little maritime experience, such assumptions are open to question in the wake of September 11, 2001. In "pirate hot spots" such as the Malacca Straight, between Sumatra and Malay Peninsula, there were 370 pirate incidents in 2002 and 445 such incidents in 2003.<sup>94</sup> The Institute for the Analysis of Global Security recently reported a belief that militant groups in Southeast Asia are practicing hijacking ships to use as weapons.<sup>95</sup> This report noted that, while attention is riveted on the Malacca Straight, the world oil bottleneck, "very little attention is placed on the U.S. underbelly of the Caribbean and the softer targets in the region closest to America's back yard: Trinidad, Venezuela and the Bahamas."96 The report details the rise of radical Islamic fundamentalism, reportedly closely aligned with Al Qaeda and the Taliban.97 Additionally, concerns with off-ship attacks remain, such as the attack on the French supertanker off the coast of Yemen in October, 2002,<sup>98</sup> and the attack on the U.S.S. Cole.<sup>99</sup>

Although these concerns are serious and legitimate, the net result has been a NIMBY phenomenon on a national scale, with cities along the Pacific and northeast Atlantic coasts leading the charge. For example, there is local opposition to the proposed LNG facility in Long Beach, California, where some have expressed public safety concerns and have indicated a belief that the terminal could be a terrorist target.<sup>100</sup> In California, one law firm's website provides extensive coverage of the prior LNG facility accidents in Algeria and Cleveland and also advertises a film on the dangers of LNG.<sup>101</sup> An organization called Rate Payers for Affordable Clean Energy, also refers to these accidents. The organization warns that LNG facilities along the California coast would lead to industrialization of an already-crowded coast, that

<sup>94.</sup> Progressive Policy Institute, Piracy Rates are Rising, http://www.ppionline.org/ppi\_ci.cfm?knlgAreaID=108&subsecID=900003&contentID=252443 (last visited Apr. 14, 2007).

<sup>95.</sup> CANDYCE KELSHALL, INST. FOR THE ANALYSIS OF GLOBAL SEC., RADICAL ISLAM AND LNG IN TRINIDAD AND TOBAGO (2004), http://www.iags.org/n1115045.htm.

<sup>96.</sup> Id.

<sup>97.</sup> Id.

<sup>98.</sup> Threats to Oil Transport, supra note 93.

<sup>99.</sup> See generally RAPHAEL PERL & RONALD O'ROURKE, CONG. RESEARCH SERV., TERRORIST ATTACK ON USS COLE: BACKGROUND AND ISSUES FOR CONGRESS 1 (2001), available at http://fil.findlaw.com/news.findlaw.com/cnn/docs/crs/coleterrattck13001.pdf.

<sup>100.</sup> See Long Beach Report, News in Depth, http://www.lbreport.com/news/dec05/lngeirfi.htm (last visited Apr. 14, 2007).

<sup>101.</sup> LNG Danger to Our Communities, Consumer Protection Attorney Tim Riley Warns about Liquefied Natural Gas, http://www.timrileylaw.com/LNG.htm (last visited Apr. 14, 2007).

LNG can erode the pipeline seals and cause dangerous leaks, and that LNG contributes twenty to forty percent more greenhouse gases than domestic natural gas.<sup>102</sup> They further note that the U.S. has adequate domestic natural gas supplies to meet a sixty-year demand and that alternative renewable energy options also exist.<sup>103</sup>

Local opposition contributed to Chevron's decision not to pursue a LNG project in Southern California that was under consideration.<sup>104</sup> Similarly, there was substantial opposition in Humbolt Bay, where the asserted risk of increased rolling blackouts and monopolistic contracts garnered support for opposition to the proposed LNG terminal.<sup>105</sup> In the spring of 2004, the community was given credit for successfully blocking the project <sup>106</sup>

Along the north Atlantic coast there are similar campaigns. The Coalition for Responsible Siting of LNG Facilities is a group that purports to be a broad based organization fighting against the siting of LNG facilities in populated areas.<sup>107</sup> Indeed, its website lists an impressive number of what appear to be citizen organizations and public officials that have expressed opposition to, or at least concern about, LNG facilities.<sup>108</sup> Interestingly, their website has a flash movie comparing LNG proposals.<sup>109</sup> The movie makes the following comparisons: there are 695 homes within a half mile of the LNG facility proposed at Providence, Rhode Island.<sup>110</sup> There are 1200 homes within a half mile of Fall River, Massachusetts.<sup>111</sup> Conversely, there are nine homes within a half mile of Lake Charles, Louisiana, and zero homes within a half mile of Elba

111. Id.

<sup>102.</sup> RACE, The On-line Home for the Coalition of Ratepayers for Affordable, Clean Energy, http://lngwatch.com/race/underFire.htm (last visited Apr. 14, 2007).

<sup>103.</sup> Id.

<sup>104.</sup> CAL. ENERGY COMM'N, SUMMARY STATUS OF LIQUEFIED NATURAL GAS PROJECT CALIFORNIA available APPLICATIONS IN 1 (2005),at http://www.energy.ca.gov/lng/documents/SUMMARY\_STATUS\_LNG\_CA.PDF; see California Energy Commission, LNG generally Projects, http://www.energy.ca.gov/lng/projects.html (last visited Apr. 14, 2007).

<sup>105.</sup> See LNG Watch, Humbolt Bay, http://lngwatch.com/lngwatch/position.html (last visited Apr. 14, 2007).

<sup>106.</sup> The Envtl. Prot. Info. Ctr., *Huge Victory for Humbolt Bay*, WILD CALIFORNIA, Spring 2004, http://www.wildcalifornia.org/publications/article-48.

<sup>107.</sup> Coalition for Responsible Siting of LNG Facilities, http://nolng.org/ (last visited Apr. 14, 2007).

<sup>108.</sup> Id.

<sup>109.</sup> Id.

<sup>110.</sup> Id.

Island, Georgia; Hackberry, Louisiana; and San Patricio, Texas.<sup>112</sup> The obvious import of the message: send the facilities to the Gulf Coast area. The Federal Energy Regulatory Commission ("FERC") rejected the proposed site for the Providence, Rhode Island terminal.<sup>113</sup> However, as the Fall River, Massachusetts site is eighteen miles east of Providence, Rhode Island, both Massachusetts and Rhode Island have filed suit challenging the approval of the Fall River terminal.<sup>114</sup> In addition, the residents and public officials near the existing Everett, Massachusetts LNG terminal have also voiced significant concerns about the risk of the terminal as a terrorist target.<sup>115</sup>

There is concern in the Gulf Coast area as well. For example, in a comment to the Port Arthur draft environmental impact statement, commentators questioned the wisdom of siting LNG terminals in an area prone to violent hurricanes and to the storm surges they produce.<sup>116</sup> Also noted was the inadequate discussion of air quality impacts and the risk of accidents or intentional terrorist attack. As noted, the draft environmental impact statement "does not discuss the potential for, and environmental effect of, a significant breach of a LNG storage tank in an area containing clusters of industrial plants, including crude oil storage tanks and chemical product storage tanks, major gasoline pipelines and a vast network of above ground and underground gasoline and natural gas lines."<sup>117</sup>

Not all of the sites presenting environmental justice concerns are in the Gulf Coast. For example, the EPA has noted that several concerns must be addressed in the draft environmental impact statement, including environmental justice concerns, for the Crown Point Landing LNG facility, Logan Township, New Jersey.<sup>118</sup> The Passamaquoddy Tribe has

115. NewsHour with Jim Lehrer, supra note 90.

<sup>112.</sup> Coalition for Responsible Siting of LNG Facilities, *supra* note 107; *see also* Comparing LNG Terminals, http://www.nolng.org/lngcompare.html (last visited Apr. 14, 2007).

<sup>113.</sup> The reason given was that the facility could not meet current construction and safety standards. Press Release, Fed. Energy Regulatory Comm'n, Commission Approves Proposed LNG Terminals in Tex. and Mass.; R.I. Terminal Rejected (June 30, 2005), http://www.ferc.gov/press-room/press-releases/2005/2005-2/06-30-05-lng.pdf.

<sup>114.</sup> Mary O'Driscoll, States Ask Court to Review Federal Regulators' Approval of Massachusetts Terminal, ENVTL. & ENERGY NEWS PM, Jan. 30, 2006, http://www.eenews.net/eenewspm/2006/01/30/archive/6/?terms=mary.

<sup>116.</sup> Comment letter from Neil J. Carman, Ph.D., Clean Air Program Director of the Lone Star Chapter of the Sierra Club, and author, to Magalie R. Salas, Sec'y of the Fed. Energy Regulatory Comm'n (Dec. 6, 2005) (on file with author).

<sup>117.</sup> Id.

<sup>118.</sup> In this case, New Jersey is also contesting Delaware's assertion of jurisdiction

also objected to a LNG terminal in Passamaquoddy Bay in Canada.<sup>119</sup> However, with the exception of the Passamaquoddy Tribe in Canada which has asserted sovereignty claims, there appear to be no high-profile anti-LNG campaigns launched on environmental justice grounds.

While most, if not all, of the concerns about LNG import terminals are serious and deserve greater attention, the disparity in resources available to concerned communities poses a significant risk that project sponsors and governmental agencies will respond only to those communities able to attract media attention and to effectively protest against the facilities. As a result, on a national scale, the facilities could well end up distributed in income and racially disparate patterns, and not necessarily where the terminals would present lower overall risk to people, the environment, and to our existing energy infrastructure. To avoid this conflict, the federal government already asserting exclusive jurisdiction over the siting of these facilities—should accept responsibility for the environmental justice implications and consider a siting scheme, or at least siting criteria, that is fair and protective.

#### III. THE ROAD TO A NATIONAL SITING SCHEME— SOME EXPLORATORY THOUGHTS

It has not gone unnoticed that complete local control over land use matters gives rise to land use regulations that protect white, wealthier neighborhoods from heavily-polluting and riskproducing land uses. As noted, not only does this approach condone the NIMBY syndrome, but it takes advantage of wealth disparity in making more vulnerable communities more susceptible to economic coaxing, like the promise of local jobs.<sup>120</sup> In order to facilitate siting, some have proposed an explicit incentives approach aimed to compensate the host community for accepting a site that will benefit many while burdening the host

under Delaware's Coastal Zone Management Act. New Jersey is concerned with endangered species of sturgeon and bald eagles and lack of information on air quality in the draft environmental impact statement. *See* Letter from Kenneth C. Koschek, Supervising Envtl. Specialist, Office of Permit Coordination and Envtl. Review, to Magalie R. Salas, Sec'y, Fed. Energy Regulatory Comm'n (Aug. 19, 2004) (on file with author), *available at* http://elibrary.ferc.gov/idmws/nvcommon/ NVViewer.asp?Doc=10229651:0.

<sup>119.</sup> Save Passamaquoddy Bay, Brochures & Flyers, Passamaquoddy People Who Take Care of the Land, http://www.savepassamaquoddybay.org/documents.html (last visited Apr. 14, 2007).

<sup>120.</sup> See, e.g., Rachel D. Godsil, Remedying Environmental Racism, 90 MICH. L. REV. 394, 407 (1991).

community.<sup>121</sup> Compensated siting schemes, in particular, have been proposed and tried as a potentially fruitful means to overcome various forms of community, regional, and state opposition that often accompany large, risk producing facilities intended to benefit multi-state or national interests, such as hazardous and nuclear waste facilities.<sup>122</sup> In 1994, Professor Vicki Been looked at the experience under the Nuclear Waste Siting Act and under various state-negotiated compensated siting provisions for hazardous waste facilities.<sup>123</sup> She also examined various surveys that showed a general increase in willingness to a locally unwanted land use ("LULU") as both accept compensation and citizen oversight increased.<sup>124</sup> She concluded however, that ultimately compensated siting schemes had been unsuccessful in getting the facilities sited.<sup>125</sup> The experience reflects an intuitive, common sense notion that people will perceive compensation as mitigating a perceived unfair burden but that compensation alone will not resolve an impasse stemming from both concern about risk and reaction against the unfair burden. The ability to obtain independent technical review of the project and citizen oversight mechanisms help a great deal, but often these features are not sufficient to swing the pendulum towards wholesale acceptance of the project.

Independent technical review and citizen oversight are two aspects of a siting approach centered on transparency and respect for the affected community. It is critically important that any siting and review process proceed in a manner that will assuage the community's fears of back-room deals among economically and politically powerful stakeholders. Towards this end, early meetings with leaders and interested persons in the community—not just officials, the local Chamber of Commerce, and others perceived to be "hand picked"—will help create conditions more likely to enhance problem solving and to resolve some disputes. Receiving input from persons perceived as neutral and even-handed has proved helpful in some situations.<sup>126</sup>

107

<sup>121.</sup> Id.

<sup>122.</sup> See generally Vicki Been, Compensated Siting Proposals: Is it Time to Pay Attention, 21 FORDHAM URB. L.J. 787 (1994).

<sup>123.</sup> Id. at 800-08.

<sup>124.</sup> Id.

<sup>125.</sup> Id.

<sup>126.</sup> See generally U.S. ENVTL. PROT. AGENCY, FED. INTERAGENCY WORKING GROUP ON ENVTL. JUSTICE, ENVIRONMENTAL JUSTICE COLLABORATIVE MODEL: FRAMEWORK TO ENSURE LOCAL PROBLEM SOLVING 3 (2002), available at http://www.epa.gov/compliance/resources/publications/ej/interagency/iwg-status-02042002.pdf.

However, fundamental value differences are not likely to be successfully resolved even by skillful facilitation, nor will such deliberate engagement transform an unwanted facility into a wanted one.

The difficulty in proposing facilities that are acceptable to all who are potentially affected by their placement cannot be overstated. Attorney Michael Gerrard noted that if a project seeks invitations from interested sponsor communities. experience in Canada has shown that the political and psychological dynamics change entirely, ultimately resulting in successful siting.<sup>127</sup> However, this may not hold as true in the United States, where such invitations by project sponsors have met with less success, particularly after the community becomes better apprised of the risks involved.<sup>128</sup> Even if the risks, nuisance impacts, and ecological damage are acceptable to the host community itself, the facility might not be acceptable to everyone the region, the state, or those situated along the in transportation route to the facility. As Gerrard observed in 1996, "in the last 20 years not a single new hazardous or radioactive waste landfill has opened in a community in the United States where there was sustained opposition consistently backed by the local government."129

Strategies such as fair compensation, fair processes, citizen oversight, and independent technical review mitigate opposition and arguably should be considered as minimum components to any siting scheme. However, other strategies provoke more vigorous opposition and enhance mobilization efforts. Surgical legislative provisions, such as riders on legislation, that preempt normal review and permitting processes are viewed as crude political deals that target areas that are vulnerable because of their lack of political clout.<sup>130</sup> Similarly, the procedural aspects of associated permit hearings and environmental review are critically important.<sup>131</sup> The impacted community is likely to view any efforts to streamline the permitting process or obtain

<sup>127.</sup> Michael B. Gerrard, Building Environmentally Just Projects: Perspective of a Developer's Lawyer, ENVTL. L. NEWS, Spring 1996, available at http://www.arnoldporter.com/publications\_articles.cfm?practice\_ID=0&publication\_id=43 5.

<sup>128.</sup> Been, supra note 122, at 800-08.

<sup>129.</sup> Gerrard, supra note 127, at 1.

<sup>130.</sup> Gerrard gives the siting provisions for Tellico Dam, the Three Sisters Bridge across the Potomac River, and Nevada's Yucca Mountain repository for spent nuclear fuel as examples of these "ramrod" laws. *Id.* at 2.

<sup>131.</sup> Id. at 3.

favorable regulatory treatment suspiciously.<sup>132</sup> If the impacted community views the expedited permit proceedings as the equivalent of a steamroller, there is likely to be direct action, or court action, to attempt to slow it down.<sup>133</sup>

Gerrard also cautions against offers of compensation if the project is harmful to public health.<sup>134</sup> While residents are understandably willing to accept compensation for reduced property values or nuisance impacts (as long as they are not severe enough to affect health), they would most likely view compensation for health impacts or risk as an unethical offer, particularly if the impacts affect children or future generations who do not have a means to directly participate in the decision.<sup>135</sup>

From an environmental justice perspective, any siting scheme should directly address distributional issues and process manner consistent with issues in а the principles of iustice.136 environmental The distributional issues could potentially include not only the foreseeable disparities, such as the unequal siting of LNG facilities, but existing disparities as well.<sup>137</sup> For example, if FERC and the U.S. Coast Guard were to devise a siting scheme that would progressively site LNG import terminals in a manner that caused no racial disparities, would such a scheme be acceptable, or should the siting of LNG facilities be viewed in the context of existing intensive industry impacts? There are, of course, compelling elements to both positions. As a practical matter, we must begin somewhere, and no siting scheme can take on all existing disparities. If it were possible to devise such a scheme, it could be used as a model to address existing disparities. On the other side of the equation is the troubling realization that even a completely fair distribution of LNG facilities would likely result in greater risk to poor and people-of-color communities. This is because the additional impacts from new but evenly distributed LNG facilities that end up in environmental justice communities will be added to heavily intensive and disparate environmental impacts from the facilities and energy infrastructure that already exist in poor communities and communities of color, particularly along the Gulf Coast. LNG infrastructure and the surrounding communities risk great harm

137. Id.

<sup>132.</sup> Id.

<sup>133.</sup> *Id*.

<sup>134.</sup> Gerrard, supra note 127, at 4.

<sup>135.</sup> Id.

<sup>136.</sup> See generally id. at 1 (balancing principles addressing distributional issues and process issues with the principles of environmental justice).

if a LNG facility were to become the target of a terrorist attack or if a design defect or operational error resulted in an accident. Thus, to get at the disparities more broadly, it would make better sense to devise a siting scheme for all major federal riskproducing facilities. However, because that is a fairly utopian proposal in light of the current political climate and the frenzied race to construct LNG terminals, this article is limited to a more modest examination of siting criteria and procedural features of a siting scheme for LNG terminals that would reduce the likelihood of distributional inequity stemming from the current initiative.

Even a more modest approach should consider existing sociopolitical realities. Although it is tempting, a completely raceblind approach to siting might be ill advised for two reasons. First, it is not possible to be race blind. We live in a society that is keenly aware of skin color, a society that still bears the scars of an overtly racist past, and as such, we are a society infused with multiple forms of subtle, unconscious, and institutional forms of racism.<sup>138</sup> Second, a siting scheme that is completely race blind with wholly neutral criteria is likely to perpetuate racial inequities. Certainly, in the abstract, a consideration of purportedly neutral criteria such as proximity to the necessary raw materials, markets, transportation infrastructure, and the availability of water, land and labor supply is sensible and cost effective.<sup>139</sup> In context, however, it is not that simple. Available sites for LNG facilities in particular are reduced to a relatively smaller pool of suitable sites along the coastline.<sup>140</sup> As is commonly known, there are industrial port areas, tourist areas, idvllic beach towns, and undeveloped areas along our various coasts. However, if individual developers continue to be allowed to make all siting decisions, as is currently the case, then it will appear logical and appropriate to site the facility in an industrial port area dotted with poor communities of color.<sup>141</sup> This is because the neutral application of the factors mentioned above result in such a location. But if it turns out that the lion's share of the facilities are located as such, and commercial port areas near wealthier, white neighborhoods just happen to have been overlooked in the process, is this an acceptable application of

<sup>138.</sup> See, e.g., Charles R. Lawrence III, The Id, the Ego, and Equal Protection: Reckoning with Unconscious Racism, 39 STAN. L. REV. 317, 322–24 (1987).

<sup>139.</sup> Gerrard, supra note 127, at 1.

<sup>140.</sup> Existing and Proposed North American LNG Terminals, *supra* note 6 (displaying the map of existing proposed and potential North American LNG terminals).

<sup>141.</sup> Gerrard, supra note 127, at 1.

neutral criteria, or are more subtle dynamics at play? That question cannot be answered with certainty one way or another, but it will most certainly give rise to reasonable suspicions about the integrity of the process.

An interesting example of just such a scenario arose in a decision to issue a combined construction and operating permit for a uranium enrichment facility in Clairborne Parrish, Louisiana.<sup>142</sup> The Intervenor in the Nuclear Regulatory Commission's decision offered testimony by Dr. Robert Bullard, a prominent environmental justice advocate and professor of sociology.<sup>143</sup> Dr. Bullard explained how the neutral use of criteria, such as looking for sites with relatively low population density, or not locating the facility within five miles of schools, nursery homes, and hospitals, resulted in a process where the pool of sites, at each successive level of screening, became dramatically more heavily populated by African-American residents. To illustrate, a relatively coarse screening process vielded seventyeight sites with an average African-American population of 28.35%. After more sites were omitted, using neutral criteria, the next pool ended up with thirty-seven sites at 36.78% African American. At the next level of the screening process, there were six appropriate sites with an average African-American population of 64.74%. Ultimately, the site chosen was a very poor community with 97.1% African-American residents.<sup>144</sup> How did this pattern emerge? At least part of the reason is that poor communities, heavily populated with people of color, often lack amenities such as schools, hospitals, and nursery homes.

Even with less extreme distributions on a national scale, at what point does one have confidence in any particular siting scheme or siting decision? It is impossible, if not highly unlikely, that FERC officials and project sponsors can proceed under a color-blind veil of ignorance as to the demographics of the areas under consideration. Using neutral criteria in a neutral manner is very likely to systematically privilege white, wealthier communities. And this is assuming the very best of intentions for all involved. Unfortunately, we do not live in a world where everyone acts with the best of intentions, especially where contentious siting decisions on high-stakes projects make the

<sup>142.</sup> In re La. Energy Servs., L.P., 45 N.R.C. 367, 1997 NRC LEXIS 20, at \*1 (1997) (discussing an environmental justice claim in relation to regulations issued under NEPA and under the President's Executive Order on Environmental Justice number 12,898).

choices very difficult.

Two examples are prominent in the environmental justice literature, not so much for the egregiousness they illustrate but simply because, as any civil rights attorney can attest, it is near impossible to find smoking guns. But the following two examples are as close as it gets. The first involves a 1984 study commissioned by the California Waste Management Board to help the Board site a waste-to-energy conversion plant.<sup>145</sup> The consultant, Cerrell Associates, Inc. of Los Angeles, in contemplating how to site such a facility with as little public opposition as possible, advised the Board to target small, rural communities whose residents are low-income, older people, or people with a high school education or less, communities with a high proportion of Catholic residents, or communities with residents engaged in "nature exploitive" industries.<sup>146</sup> In Los Angeles it is not an implausible assumption that Latino communities in the area are likely composed of low-income Catholic residents with little education, due to the large immigrant population.

The second example concerns an observation made in 1991 by Lawrence Summers when he was chief economist of the World Bank.<sup>147</sup> In an internal memo, he queried "[s]houldn't the World Bank be encouraging more migration of the dirty industries to LDCs [less developed countries]?"<sup>148</sup> Despite the fact that LDCs would likely lack the legal or regulatory infrastructure to accept the dirty industries of the globe, Summers opined that such a move would be efficient because:

[t]he measurement of the costs of health impairing pollution depends upon the foregone earnings from increased morbidity and mortality. From this point of view a given amount of health impairing pollution should be

<sup>145.</sup> LUKE W. COLE & SHEILA R. FOSTER, FROM THE GROUND UP: ENVIRONMENTAL RACISM AND THE RISE OF THE ENVIRONMENTAL JUSTICE MOVEMENT 71–72 (New York Press 2000).

<sup>146.</sup> J. STEPHEN POWELL, CERRELL ASSOCS., INC., POLITICAL DIFFICULTIES FACING WASTE-TO-ENERGY CONVERSION PLANT CITING app. C at C1-4 (1984); COLE & FOSTER, *supra* note.

<sup>147.</sup> Summers was president of Harvard University from 2001 to 2006. See Harvard University, The Office of the President, History of the President's Office, http://www.president.harvard.edu/history/27\_summers/summers.html (last visited Apr. 14, 2007).

<sup>148.</sup> LISA HEINZERLING & FRANK ACKERMAN, PRICING THE PRICELESS: (2002)COST-BENEFIT ANALYSIS OF ENVIRONMENTAL PROTECTION 24 The Whirled Bank Group, Lawrence Summers, (citing The Bank Memo, http://www.whirledbank.org/ourwords/summers.html), available at http://ase.tufts.edu/gdae/publications/C-B%20pamphlet%20final.pdf.

done in the country with the lowest costs, which will be the country with the lowest wages. I think the economic logic behind dumping a load of toxic waste in the lowest wage country is impeccable and we should face up to that.<sup>149</sup>

If one were to apply the same economic logic to the siting of LNG import terminals, they would end up in heavilyindustrialized port areas that have large poor populations, like the Gulf Coast or areas with similar demographic profiles on the northeast coast. The demographics of these communities are heavily African American and Latino.<sup>150</sup> One has to wonder whether a similar logic is now operating behind the neutral criteria applied in various board rooms and governmental agencies throughout the U.S.

For all of the above reasons, and in order to avoid inequitable distributional outcomes and the resulting perception of discriminatory siting practices, it is to the advantage of all to have a uniform, consistently-applied process and siting criteria that explicitly consider environmental justice. At the very least, FERC and the U.S. Coast Guard should undertake a comprehensive environmental justice analysis of LNG terminal proposals using the environmental justice guidance issued by the Council on Environmental Quality in 1998.<sup>151</sup> Under such guidance, for example, FERC could consider:

- existing health vulnerabilities of affected residents, and subsistence patterns of consumption of natural resources in the area (e.g., fishing);

- existing pollutants from other sources, existing risks from other risk-generating land uses, and the cumulative effects of the LNG project in relation to these existing pollutant loads and environmental risks;

- the potential for disproportionately high and adverse human health or environmental effects on minority populations or low income populations;

- relevant public health data and industry data concerning the potential for multiple or cumulative exposure to human health or environmental hazards in the affected population;

<sup>149.</sup> The Whirled Bank Group, Lawrence Summers, The Bank Memo, http://www.whirledbank.org/ourwords/summers.html (last visited Apr. 14, 2007).

<sup>150.</sup> U.S. Census Bureau, Race and Hispanic Origin in 2005, http://www.census.gov/population/pop-profile/dynamic/RACEHO.pdf (last visited Apr. 14, 2007).

<sup>151.</sup> GUIDANCE UNDER NEPA, supra note 16, at 8-9; Executive Order No. 12,898, supra note 16.

- interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the LNG terminal project;

- any linguistic, cultural, institutional, geographic or other barriers to meaningful public participation; and other principles set forth in the Environmental Justice Executive order and Environmental Justice NEPA Guidance.<sup>152</sup>

If the regulatory agencies wanted to undertake a more comprehensive look (and they should), they could undertake an initial analysis of the potential disparate impacts not only on a site-specific level, but on a regional and national scale. A programmatic environmental impact statement would have been an appropriate vehicle for such an analysis, but apparently one was not undertaken.<sup>153</sup> Nonetheless, it is not too late to analyze the situation as many of the projects are still in various stages, some have a way to go before completion, and new projects are still being proposed. While such a mid-course correction might raise concerns about lack of notice to the regulated community, it is important to bear in mind that project sponsors knew that FERC would be issuing environmental impact statements and, thus, would be looking at socioeconomics generally and environmental justice in particular.<sup>154</sup> In addition, the executive order on environmental justice should also serve to provide adequate notice.<sup>155</sup>

Regardless of whether FERC and the U.S. Coastguard commit to issue formal siting criteria by rule, or simply provide guidance on how they will respond to potential disparate adverse impacts on poor communities and communities of color, they will encounter the difficult issue—encountered in most land use scenarios—of the appropriate role of local, state, and tribal prerogatives vis a vis the federal government. It will require that these various levels of government work together to look seriously at environmental justice issues without opportunism by local governments or skeptical "NIMBYism" by the federal government. It is a telling statement that the FERC website lists "NIMBY" as a major concern in the siting of LNG facilities, but

<sup>152.</sup> GUIDANCE UNDER NEPA, supra note 16; Exec. Order No. 12,898, supra note 16.

<sup>153.</sup> See PERCIVAL, supra note 57, at 810-22 (discussing the timing and scope complications of a "programmatic EIS," i.e., an environmental analysis that includes several related actions rather than a single project).

<sup>154.</sup> See FERC, LNG Issues—Environment, http://www.ferc.gov/industries/ lng/enviro.asp (explaining the EIS process) (last visited Apr. 14, 2007).

<sup>155.</sup> Exec. Order No. 12,898, supra note 16.

does not include environmental justice as a similar concern.<sup>156</sup> It has to be borne in mind that environmental justice concerns are not an aspect of NIMBY. Environmental justice communities are not simply concerned with siting an unwanted land use "anywhere else." The crux of the concern has been with disproportionately adverse impacts and exceptionally high concentrations of risk, generally from multiple sources. The claim is for equitable treatment, and that point should be made clear.

#### **IV. CONCLUSION**

No system of siting criteria can yield a perfectly equitabledistribution. We are not likely to see an equal number of LNG import terminals in posh waterfront or remote pristine areas as in industrial port areas; nor should we, particularly from an ecological standpoint. But we can, and should, strive for a more fair distribution than the one likely to occur given current proposals and the foreseeable results of current anti-LNG campaigns. The pretense of color-blindness and the fig leaf of neutral criteria will not work, especially in the context of our insatiable demand for energy sources, the fear of the populace, and the federal government's single-minded tenacity. The path of least resistance will be the path towards environmental injustice, and any minimally responsible government must deal with the culpable dynamics explicitly. Hopefully we will move, however incrementally, towards that end.

115

<sup>156.</sup> FERC, LNG Issues—Public Concerns, http://www.ferc.gov/industries/lng/indus-act/issues/public.asp (last visited Apr. 14, 2007).