Hazardous Waste Disposal and the Problems of Stigmatic and Racial Injury

R. George Wright*

I. INTRODUCTION

Hazardous waste disposal facilities are necessary evils. Most people would prefer that such facilities be sited somewhere other than their proverbial backyard. Only a few potential hazardous waste disposal sites can be eliminated from consideration on the basis of uncontroversially neutral “technical” criteria. Whatever the present or future federal regulatory scheme, the inevitable question will be: upon what grounds may area residents or a local or state government object to or restrict the siting or operation of a hazardous waste disposal facility?

In particular, this article examines the two most interesting grounds for local objection to the siting of hazardous waste disposal facilities. The first objection is the claim that the residents of a particular state or locality are, through one process or another, bearing disproportionate burdens of hazardous waste disposal. The argument is that other waste-producing states are evading their responsibilities, to the detriment of...
residents of the site state. In particular, the siting decision raises the risk of stigmatic injury to the receiving state.

The most obvious response is that apart from the changing features of any relevant federal regulatory scheme, the "dormant" or "negative" Commerce Clause, among other arguably relevant constitutional provisions, sets crucial limits on state prohibition of, taxation of, or other restrictions on the receipt of out-of-state hazardous waste. The strength of this "stigmatic injury" objection, therefore, depends upon the purposes at stake in dormant Commerce Clause jurisprudence. The theory of the dormant Commerce Clause is surprisingly receptive, in appropriate instances, to local or state governmentally imposed barriers to the importing and disposal of hazardous wastes generated out of state.

The second objection to local siting of hazardous waste disposal facilities is even more interesting, because it is both subject to more precise empirical investigation and even more deeply rooted in contemporary constitutional values. Hazardous waste facility siting has had a predictably disproportionate adverse impact upon rural areas and upon the poor and politically unorganized. Even more dramatically, the uncompensated risks and costs of hazardous waste disposal sites may fall upon racial and ethnic minorities in proportions far beyond that which can be accounted for by random chance. While no single authority makes such siting decisions, and while it is unclear to what extent the disproportionate burdening of racial and ethnic minorities is consciously intended, the stark pattern of overall disproportionate net burdening of minorities is unmistakable. At that point, some form of redress under the Equal Protection Clause is appropriate. This article explores some of the most crucial evidence and some of the constitutional issues associated with equal protection-based constraints on hazardous waste facility siting.

II. THE LOCAL BURDENS OF HAZARDOUS WASTE DISPOSAL FACILITIES

Notoriously, communities seldom clamor for the local construction of hazardous waste disposal facilities. Such local opposition is not

---

4. See id. §§ 2021(b)-(d), 6901-6991, 9601-9657, 10101-10226.
5. See infra note 78 and accompanying text. The Commerce Clause, binding the states in its "dormant" aspect, grants Congress power to "regulate Commerce . . . among the several States." U.S. Const. art. I, § 8, cl. 3.
6. See infra notes 37-119 and accompanying text.
7. See infra notes 79-119 and accompanying text.
8. See U.S. Const. amend. XIV.
9. See supra note 1.
usually completely irrational. Of course, the development of a hazardous waste disposal facility will ordinarily involve genuine local benefits, such as increased employment and an enhanced property tax base. Nevertheless, it is not surprising that most hazardous waste disposal siting attempts are frustrated by local opposition, and that states typically do not develop such sites on a scale commensurate with the national need.

Among the major perceived or actual local costs, of course, are the enhanced risks to health and to the local environment. There may also follow reduced local property values, noxious fumes, and even the attraction of hazardous waste-generating industry. Local benefits, such as new employment and increased tax revenues, tend to be surprisingly modest. As Professor Dan Tarlock has observed, "[h]azardous-waste management facilities are capital-rather than labor-intensive and generally do not offer much of a tax bonanza to local communities."

Importantly, the costs and benefits of the hazardous waste facility often are not internalized or captured, as the case may be, by their creator. This casts further doubt on the economic rationality of the siting decisions. Health risks created by the site, for example, are hardly confined to employees or other persons in contractual privity with the siteowners; the long-term health of the surrounding community may be jeopardized. The environmental benefits of the site, in concentrating hazardous waste in a single locality, extend far beyond the surrounding community. Entire geographic regions may benefit from a cleaner environment without providing compensation for, or otherwise helping to defray, the localized social costs of the disposal site. In sum, hazardous waste sites generate substantial positive and negative externalities to largely separate groups of people. There is little reason to

10. See Brion, supra note 1, at 450.
15. See Bacow & Milkey, supra note 1, at 268-69.
16. Tarlock, supra note 1, at 544.
17. See, e.g., Florini, supra note 11, at 325.
19. See Florini, supra note 11, at 325-27.
Imagine that the number and operation of such sites reflect any broad social rationality.

Local and state opposition to hazardous waste site construction, or to such site's acceptance of any and all hazardous waste from all sources, takes a variety of forms. A state or locality may, of course, seek to prevent the construction of the site. Failing that, a state or locality may, depending upon the nature of its grievance, bar the importation of non-local hazardous waste.\textsuperscript{20} Less drastically, a state may attempt to restrict the importation of out-of-state hazardous waste based on reciprocity-of-rights grounds,\textsuperscript{21} hardship, capacity-limit considerations,\textsuperscript{22} or by reference to participation in interstate waste-disposal compacts.\textsuperscript{23}

Each of these restrictions may be combined with some form of exclusive or nonexclusive government ownership, or government operation, of the hazardous waste facilities. Some form of government ownership of waste-disposal facilities in general is common.\textsuperscript{24} This is important, in our context, in that it might be argued that governments


\textsuperscript{21} See, e.g., \textit{Hardage v. Atkins}, 582 F.2d 1264, 1265-67 (10th Cir. 1978) (relying on the Court's intervening decision in \textit{City of Philadelphia v. New Jersey}, 437 U.S. 617 (1978), the \textit{Hardage} court reversed the lower court's holding that a reciprocity statute restricting the importation of industrial waste did not violate the Commerce Clause because the waste was not an article of commerce).


\textsuperscript{23} See, e.g., \textit{National Solid Wastes Mgmt. Ass'n v. Alabama Dep't Envtl. Mgmt.}, 910 F.2d 713, 717 (11th Cir. 1990), \textit{modified on denial of reh'g}, 924 F.2d 1001 (1991); Florini, supra note 11, at 334-35. \textit{But see Hunt v. Chemical Waste Mgmt., Inc.}, No. 1901043, 1991 WL 151546, at *20 (Ala. July 11, 1991). In \textit{Hunt}, the Alabama Supreme Court openly questioned the Eleventh Circuit's conclusion in \textit{National Solid Wastes} that hazardous waste was an article of commerce. \textit{Id.} Even if the Eleventh Circuit was correct, the \textit{Hunt} court concluded that an additional fee imposed solely upon imported hazardous waste did not violate the Commerce Clause. \textit{Id.} The court's decision was based on a legislative finding that the additional fee was an effective way to deal with the health and environmental hazards associated with the disposal of hazardous waste. \textit{Id.}

have broader discretion in restricting interstate commerce in the flow of wastes through state-owned facilities than through privately owned facilities. It has been argued, for example, that absent congressional preemption or other prohibition, "if New Jersey wants its landfill space to be used only to dispose of New Jersey waste, it may accomplish this by purchasing the privately-owned landfills through its eminent domain power, and then limiting their use." Of course, such exclusion of out-of-state waste from state-owned disposal sites is no less a discriminatory burden on interstate commerce than exclusion from privately-owned sites, especially if the government holds a monopoly on such sites.

On some accounts, state ownership of the waste disposal site should not bar courts from determining whether the state's policy regarding foreign access to the site impermissibly restricts the flow of interstate commerce.

Under appropriate circumstances, perfectly legitimate and constitutionally justified reasons exist for states or localities to reject the construction of hazardous waste sites, or to restrict the operation or utilization of such sites, on broadly equitable or "political," as opposed to narrowly technical, grounds. But the arguments advanced below do not rely upon state investment in, or ownership of, the site, or what is otherwise known as the "market-participant" exemption from the constraints of the dormant Commerce Clause.

Whatever its precise contours or ultimate fate, the "market-participant" doctrine in this context would mean that the residents of a

---

25. Among the recent cases, perhaps the most valuable discussion is contained in Swin Resource Sys., Inc. v. Lycoming County, Pa., 883 F.2d 245 (3d Cir. 1989), cert. denied, 110 S. Ct. 1127 (1990). For discussions citing much of the broadly relevant case law in a variety of contexts, see Thomas K. Anson & P.M. Schenkkan, Federalism, the Dormant Commerce Clause, and State-Owned Resources, 59 TEx. L. Rev. 71 (1980); Campbell, supra note 12; Pomper, supra note 13; A. Dan Tarlock, So It's Not "Ours"—Why Can't We Still Keep It? A First Look at Sporhase v. Nebraska, 18 LAND & WATER L. Rev. 137 (1983).


27. See Anson & Schenkkan, supra note 25, at 90.

28. See, e.g., Campbell, supra note 12, at 185.

governmental unit who have invested or sacrificed to produce a particular good or service, such as a waste disposal facility, should be entitled to exclude non-contributing outsiders from the use of that particular good or service. The basic idea would be that the government's creation or development of a valuable good or service justifies far broader rights to control its use or disposition, than if the government were merely regulating, for public interest purposes, the use or disposition of a privately developed good or service.\(^{30}\)

Any version of the market-participant exemption is deeply problematic. Doctrinally, there is some argument for the view that the United States Supreme Court effectively overruled the cases supporting the exemption in *Garcia v. San Antonio Metropolitan Transit Authority*.\(^{31}\) On such a view, the distinction between creating and regulating wealth is entitled to no more constitutional respect than the distinction between presumptively immune traditional or integral governmental functions and other governmental functions abandoned in *Garcia*.\(^{32}\)

The distinction between government development of a good or service and government regulation of the private development of that good or service is simply too murky in the relevant cases. One could argue, certainly, that the government does not sacrifice or invest to create a site that is technically safe and appropriate for use as a hazardous waste disposal facility; such a site is simply a natural resource.\(^{33}\) Of course, someone must transform the site from a raw geological formation into a functioning artificial landfill. But even the most purely privately-owned disposal facilities will typically have received some public expenditure benefit, if only with respect to the security of the site. Why should the state not be able to control the site's waste acceptance policy to an extent commensurate with the state's contribution to the physical or financial viability of the private waste-disposal operation?

The deeper problem, though, is why any sort of public investment in or assistance to the development of a hazardous waste disposal site

---


33. See *Reeves*, 447 U.S. at 443-44 (citing *City of Philadelphia*, 437 U.S. at 617, for the proposition that a landfill, unlike cement, is a natural resource); Florini, *supra* note 11, at 333.
should entitle the state to control access to the developed site in ways arguably injurious to outsiders, especially where it is difficult for outsiders to develop alternatives to the disposal site in question.\textsuperscript{34} Suppose a state had exercised the industry and foresight necessary to develop the only practicable source of water for an entire region, and that, as is the case, no close substitutes for water exist. Does that state have the moral right, if it so chooses, to not only set a high price for the water, but to flatly prohibit its sale, directly or indirectly, to outsiders?

Doubtless, prudence suggests that we accord the public or private developer of the resource substantial control over the economic proceeds of the developed resource, lest we impair the incentive to develop the resource in the first place.\textsuperscript{35} But there is no reason to suppose, in general, that resources will remain underdeveloped if the developer of the resource is rewarded in some fashion other than a right to exclude willing, paying customers on grounds of their out-of-state status.

Admittedly, there is a distinguished pedigree for the idea that appropriating or developing a resource before others do so morally entitles the developer to broad rights to control access to that resource.\textsuperscript{36} But there are obvious moral limits to the scope of the developer's rights to restrict access to that resource, even where the developer has not prevented others from developing alternatives, and even where no rejected customer would have had access to the resource if the developer of the resource had never existed. The foresight and exertion of a public or private developer does not necessarily entitle the developer to impose disproportionate suffering on others through restricting access

\textsuperscript{34} Cf. Campbell, supra note 12, at 187 ("It seems likely that some states will have no suitable landfill sites for the disposal of hazardous and low-level radioactive wastes."). But cf. Lefrancois v. Rhode Island, 669 F. Supp. 1204, 1211 (D.R.I. 1987) (several applications pending to construct alternative disposal facilities in Rhode Island); Evergreen Waste Sys., Inc. v. Metropolitan Serv. Dist., 643 F. Supp. 127, 132 (D. Or. 1986) ("[N]othing prevents private operators from purchasing land in the District and developing it for landfill."). For the view that the commercial impact of state restrictions will tend to be more serious where the state holds a monopoly in the supply of the service in question, see Anson & Schenkkan, supra note 25, at 90.

\textsuperscript{35} See, e.g., Pomper, supra note 13, at 1321.

\textsuperscript{36} The classic argument is found in John Locke, Two Treatises of Government, 305-06 (Peter Laslett ed., 1967) (1698). For a penetrating criticism of Locke's theory in this respect, see Robert Nozick, ANARCHY, STATE AND UTOPIA 174-82 (1974). Nozick's own distinctively libertarian approach to the breadth and strength of property rights is in turn trenchantly criticized in several of the essays contained in Reading Nozick: Essays on Anarchy, State, and Utopia (Jeffrey Paul ed., 1981). For both an exposition of the relation between Locke's approach and Nozick's, and an effective critique of the latter, see Virginia Held, John Locke on Robert Nozick, 43 Soc. Res. 169 (1976).
to the resource. Just as there are moral limits to the right of the discoverer or developer of the sole oasis to prevent the thirsty from drinking within a hundred miles of the oasis, so there may be moral limits to a state's right to restrict access of out-of-staters to a hazardous waste disposal site developed by the state, especially where no comparable waste disposal sites are available to others, through no fault of their own.

Thus, for a variety of reasons, the market-participant doctrine does not provide a sound, convincing justification for governmental restrictions on out-of-state access to hazardous waste disposal facilities. More promising grounds exist, however, for a state substantially restricting the importation of hazardous waste, as we shall see below.


A particularly interesting theme recurs sporadically throughout discussions of state or local restrictions on the siting or exploitation of hazardous waste disposal facilities. Fear is sometimes expressed, not of the health risks or costs of the facility and its operation, but of the state becoming, or becoming perceived as, "the dumping ground" for a geographical region or for the entire nation.37

Doubtless, the "dumping ground for the nation" concern does not exhaust a state or locality's motivation in restricting the siting or operation of hazardous waste facilities. Indeed, in some cases, it may be difficult to tell where this concern ends, and others, such as safety and environmental concerns, regional isolationism, or a selfishly irresponsible shirking of responsibilities begin.38 Nevertheless, the sense of indignity, exploitation, and disproportionate burdening underlying the "dumping ground" concern is in principle distinguishable, and de-

37. See, e.g., Government Suppliers Consol. Servs., Inc. v. Bayh, 753 F. Supp. 739, 745 (S.D. Ind. 1990) (Bayh II) (Governor Bayh as candidate seeking "to ensure that Indiana did not become the dumping-ground of trash from the East Coast"); National Solid Wastes Mgmt. Ass'n v. Alabama Dep't of Env'l Mgmt., 729 F. Supp. 792, 804 (N.D. Ala.) (aim of Alabama statute "to prevent Alabama from becoming the dumping ground for those states that refuse to 'clean up their act' under federal law") rev'd, 910 F.2d 713 (11th Cir. 1990), modified on denial of reh'g, 924 F.2d 1001 (1991); Harvey Lieber, Federalism and Hazardous Waste Policy, in THE POLITICS OF HAZARDOUS WASTE MANAGEMENT 68 (James P. Lester & Ann O'M. Bowman eds., 1983) (quoting an Arkansas resident complaining that "[w]e feel we are a dumping ground for the entire country").

38. See, e.g., Government Suppliers Consol. Servs., Inc. v. Bayh, 734 F. Supp. 853, 856 (S.D. Ind. 1990) (Bayh I) ("The simple truth is that no one wants to live near a landfill with the accompanying odors, fleets of garbage trucks, and pollution.").
pending upon the particular circumstances of each case, may be justified.

Being, or being perceived as, the region or nation’s “dumping ground” is thus a very real, if quite intangible, sort of injury. The injury may properly be referred to as stigmatic in character.39 Stigmatic injuries are not necessarily morally or constitutionally trivial.40 Stigmatic injuries in the context of hazardous waste siting decisions in part go, to one degree or another, to the social bases for individual self-respect and to individual dignity. That is to say, stigmatic injuries are actions or decisions of others tending in part to undermine the material or institutional grounds on which we found our self-respect. To some extent, our self-respect ordinarily depends upon being respected, in some relevant sense, by other people.41 To the extent that stigmatic injuries implicate the social bases of self-respect, or that they undermine the dignity of the injured parties, they may be among the most fundamental breaches of social justice.42

This is not to suggest that moral theory or the Constitution guarantees against all personal slights, or that we are all legally entitled to think well of ourselves. But there are plainly instances, actual or imaginable, in which a broad federal policy intentionally or unintentionally results in serious stigmatic injury to a group of persons in such a way as to call for moral redress, if not for legal redress via the Equal Protection Clause.43

In particular, there is some tension between the Equal Protection Clause, on the one hand, and the unfettered flow of commerce on the

39. See, e.g., Andreen, supra note 1, at 812 n.6, 814 & n.10 (referring particularly to PCB disposal sites); Bacow & Milkey, supra note 1, at 268 (referring to "the stigma associated with being labelled ‘the region’s dump’").


43. See U.S. CONST. amend XIV.
other. Doubtless, the geographic distribution of hazardous waste disposal facilities is, in some sense, the result of numerous independent, uncoordinated decisions by many people, including private parties. Governments are generally not responsible for the actions of private parties.\textsuperscript{44} Whether the decisions resulting in the siting of hazardous waste facilities really amount only to the constitutionally neutral, untainted, pre-political operation of a purely private marketplace is, however, extremely doubtful.\textsuperscript{45}

In any event, judicial application of the Commerce Clause may involve the courts giving binding legal effect to the express or implied intent of Congress that commerce in hazardous waste\textsuperscript{46} be unconstrained in certain ways. Even a judicially inferred intent on the part of Congress to let the proverbial chips fall where they may amounts to a policy adopted, if only by default, by Congress. As such, an inferred congressional policy may amount to state action\textsuperscript{47} triggering equal protection rights.\textsuperscript{48} In practice, of course, Congress has taken an active role in the general question of hazardous waste disposal siting and operation.\textsuperscript{49}

Clearly, not every geographic pattern of distribution of hazardous waste disposal sites amounts to a violation of anyone's equal protection rights. But at least in extreme instances, this problem may arise. It would not be startling if the most active hazardous waste disposal facilities were concentrated, not merely in sparsely populated areas, but

\begin{itemize}
  \item \textsuperscript{45} For a general discussion, see Cass R. Sunstein, \textit{Lochner's Legacy}, 87 \textit{COLUM. L. REV.} 873, 886-88 (1987). It may well be the case that landfill space is at a premium in some states, see Government Suppliers Consol. Servs., Inc. v. Bayh, 753 F. Supp. 739, 748 (S.D. Ind. 1990) (\textit{Bayh II}), or that "the market may not support a site in every state," Campbell, supra note 12, at 187. But these facts may not be utterly unaffected by state governmental policies intentionally or inadvertently helping to preserve them or bring them about. A state-imposed tax, inspection fee, or zoning requirement obviously may affect the market viability of hazardous waste sites within that state.
  \item \textsuperscript{46} For brief discussions of hazardous waste as qualifying as an item of commerce, see National Solid Wastes Mgmt. Ass'n v. Alabama Dep't Envtl. Mgmt., 910 F.2d 713, 718-19 (11th Cir. 1990), modified on denial of reh'g, 924 F.2d 1001 (1991); Illinois v. General Elec. Co., 683 F.2d 206, 213-14 (7th Cir. 1982); Hardage v. Atkins, 582 F.2d 1264, 1266 (10th Cir. 1978).
  \item \textsuperscript{47} For a sense of how congressional responsibility for a given state of affairs may amount to state action, even if that responsibility is shared with private actors, see R. George Wright, \textit{State Action and State Responsibility}, 23 \textit{SUFFOLK U. L. REV.} 685, 689-90 (1989).
  \item \textsuperscript{48} For a discussion of federal, as opposed to state, liability for what amounts to an equal protection violation, see Bolling v. Sharpe, 347 U.S. 497, 499 (1954).
  \item \textsuperscript{49} See supra note 3. Congress, of course, retains plenary power to redress any sort of state discrimination in the commercial area. See Sedler, supra note 26, at 1025. Congress has not yet exercised that power in any clear, systematic fashion in the hazardous waste site context. See \textit{Bayh II}, 753 F. Supp. at 743.
\end{itemize}
in relatively poor areas unable to effectively exercise political power in their own interests. The matter of race will be taken up separately in the section following.

Any community that correctly believes that it has become, either through intention or inadvertence, the "dumping ground" for a broader region or the entire nation naturally incurs a stigmatic or dignitary injury.\(^50\) Whether intentional or not, the injury may reflect a lack of respect and may tend to undermine the bases of the self-respect of the adversely affected community.\(^51\) If a locality is chosen for uncompensated victimization as the designated dumping ground for unwanted, potentially dangerous waste products, there may, in extreme cases, be at work relations of political domination, of subordination, of center and periphery, and of dependency most familiarly described in the literature on economic imperialism.\(^52\)

Should the Commerce Clause nevertheless control over the Equal Protection Clause in such cases? Perhaps the Commerce Clause, with its emphasis on the free flow of goods and services among states without artificial barriers and restrictions, contemplates such unfortunate outcomes as those referred to above. The Commerce Clause, in effect, would amount to a warning to all localities to ensure, through their own economic development, that the most economically valuable use of their land is not as a hazardous waste site.

The best response to this objection is that the Commerce Clause does not clearly and unequivocally command such results. In fact, the logic of the purposes and values\(^53\) of the Commerce Clause to a substantial degree runs counter to the sacrifice of one or a few localities as the stigmatized victims of the market in hazardous waste. It is not clear that a state or locality that genuinely seeks to avoid the stigmatic injury

\(^{50}\) See *supra* notes 37-42 & accompanying text.

\(^{51}\) See *supra* notes 41-42 & accompanying text.


\(^{53}\) For a recent judicial statement of the premise that the Commerce Clause was intended to serve some discrete set of purposes or values, see *Norfolk S. Corp. v. Oberly*, 822 F.2d 388, 399 (3d Cir. 1987).
of becoming a dumping ground for the region or nation is repudiating the purposes of the Commerce Clause.

It is commonly said, for example, that the Commerce Clause is aimed at preventing the states from engaging in economic isolationism, from dodging their responsibility for contributing to national economic goals, or from refusing to contribute their fair share to such ends. The Commerce Clause is said to require that commerce in even undesirable goods be a two-way street, and that the states display solidarity in this regard. Perhaps most importantly, each state must recognize the significance of national economic and political unity, as opposed to hostility and division, and not arbitrarily restrict the inflow of hazardous waste merely because such waste was generated out of state.

In the context of a community genuinely seeking to avoid the uncompensated stigmatic or dignitary injury of long-term service as the region or nation's hazardous trash receptacle, each of these purposes or values underlying the Commerce Clause is at the very least equivocal. To reject such victimization is precisely to argue for burden-sharing, a two-way street in commerce, fairness of shares, a sense of unity, commonality of status, solidarity, mutual responsibility, and national unity. Far from obvious is why a process that results in uncompensated stigmatized victims necessarily optimizes, over the long term, unity and solidarity.

55. See, e.g., Rollins Envtl. Servs., Inc. v. Parish of St. James, 775 F.2d 627, 637 (5th Cir. 1985).
56. See, e.g., Tarlock, supra note 1, at 548.
59. See, e.g., Baldwin v. G.A.F. Seelig, Inc., 294 U.S. 511, 523 (1935); Bayh II, 753 F. Supp. at 763; Richard B. Collins, Economic Union As a Constitutional Value, 63 N.Y.U. L. Rev. 43, 43-46 (1988); Pomper, supra note 13, at 1323; Donald H. Regan, The Supreme Court and State Protectionism: Making Sense of the Dormant Commerce Clause, 84 Mich. L. Rev. 1091, 1113 (1986) ("State protectionism is unacceptable because it is inconsistent with the very idea of political union, even a limited federal union. Protectionist legislation is the economic equivalent of war. It is hostile in its essence."); Smith, supra note 54, at 1206.
It is still possible, though, to interpret the Commerce Clause as mandating a laissez-faire vision of free trade, or as enacting the market-driven vision of Herbert Spencer’s *Social Statics.* But laissez-faire would seem an odd approach to the development of national solidarity, and on the basis of the above considerations, it seems doubtful that the Commerce Clause is most coherently read as enshrining laissez-faire generally. At least in the stigmatic-injury cases, the Commerce Clause does not mandate laissez-faire in the disposal of hazardous wastes.

It is then possible to argue, however, that in any case in which victimization or the disproportionate burdening of one locality is involved, that community can be compensated, thereby leaving the siting process itself, and the requirement of non-discriminatory acceptance of out-of-state hazardous waste, intact. The promise of fair compensation, however, is invariably deeply problematic.

Doubtless, it is possible in theory to imagine a private hazardous waste site developer offering a wide-ranging compensation package to adjoining landowners for depressed land values, to the local municipality for increased infrastructure costs, and to local citizens for potential health and environmental risks. Offers of compensation, however, have usually proven unsuccessful in overcoming opposition to the siting of hazardous waste facilities. In some cases, offers of compensation have only enhanced local opposition to such sites.

This result should not be surprising. Offers of compensation may merely enhance suspicions of the dangers or risks at stake, and in any case, the size of the compensation package is likely to be inadequate

---

62. See, e.g., *DuMond,* 336 U.S. at 539; see also Mark Tushnet, *Rethinking the Dormant Commerce Clause,* 1979 Wis. L. Rev. 125, 130-31 (discussing the logic of *DuMond* in this respect).


64. See Collins, *supra* note 59, at 63-64 (recognizing possible tensions between laissez-faire economics and solidaristic burden-sharing).


67. See Bacow & Milkey, *supra* note 1, at 275-76.

68. See *id.* at 276; Delogu, *supra* note 1, at 215; Farkas, *supra* note 1, at 458-59.

69. See Bacow & Milkey, *supra* note 1, at 276; Delogu, *supra* note 1, at 215.

70. See Bacow & Milkey, *supra* note 1, at 276.

71. See Farkas, *supra* note 1, at 458-59.

72. See Bacow & Milkey, *supra* note 1, at 276-77.
from the standpoint of local citizens. Many people will resist any explicit calculation of a dollar equivalent of an enhanced personal safety risk. Worse, there may, in some cases, be an unconscious tendency to undervalue the interests of the typically rural, poor, minority, and politically powerless people affected.

Finally, and most important in this context, stigmatic or dignitary injuries may, by their very nature, in some sense not be susceptible of compensation. This is not merely because dignitary or stigmatic injuries are intangible, subjective, and difficult to quantify, or because it may be difficult to arrive at a community consensus on the proper amount. Rather, it is chiefly because a stigmatic injury of the kind discussed in this article remains largely unaffected by any imaginable payment arrangements.

If it is degrading, or a badge of low hierarchical status, for a community to be intentionally or inadvertently assigned the role of hazardous waste dump for a nation, it remains such even if that community is being compensated to assume that status. The character of the stigma may remain essentially constant, whether the stigmatized community receives lesser or greater financial benefit. Attempting to compensate for imposing a degrading status on a community is thus, in some sense, self-defeating. In the eyes of some, paradoxically, payment for assuming a degrading status only worsens the stigmatic injury.

The best solution for the problem of stigmatizing a few politically defenseless communities is to spread the in-kind burden of the disposal of hazardous waste much more broadly, among a far greater number and greater variety of communities. This solution is not optimal from a narrowly pecuniary, short-term perspective. But spreading the actual disposal among a larger number and variety of technically suitable localities would reduce stigmatic injuries and ultimately contribute to a genuine sense of unity, national solidarity, and the equitable sharing of burdens contemplated not only by the Equal Protection Clause.

73. See Brion, supra note 1, at 497.
74. See Bacow & Milkey, supra note 1, at 276.
75. See Brion, supra note 1, at 497.
76. See Bacow & Milkey, supra note 1, at 277.
77. There is some precedent for this approach, at least at the state level. See Tarlock, supra note 1, at 361 (citing Michigan's geographical distribution requirement embodied in Mich. Comp. Laws Ann. § 299.309(2)(a)-(3)(c) (West 1980)); see also supra note 2.
78. Some of the arguments advanced in this article under the rubric of the Equal Protection Clause could also be advanced under the rubric of the Article IV, Section 2 Privileges and Immunities Clause. It has been argued, for example, that "article IV's privileges and immunities
but by the Commerce Clause itself. If the threat of this enforced sharing leads to political pressure for less production of hazardous waste, or to increased treatment of hazardous wastes to reduce their toxicity, or to safer landfills, so much the better.

IV. HAZARDOUS WASTE DISPOSAL, RACIAL VICTIMIZATION, AND THE SCOPE OF THE EQUAL PROTECTION CLAUSE

Hazardous waste disposal facilities are not usually sited in communities that possess the political ability to successfully resist such siting.79 Not surprisingly, affluent and economically modest communities differ in their abilities to fend off hazardous waste facility construction,80 to the prejudice, typically, of the relatively poor.81 Even systematic victimization of the relatively poor, however, is not subject to particularly intensive judicial scrutiny.82 But the uncompensated burdens of hazardous waste disposal facility siting nationally do not fall merely upon the poor. The best available evidence indicates with some clarity that such burdens systematically and disproportionately fall upon racial minorities as such.83 Assuming, for the moment, that such otherwise inexplicable disproportionate burdening of racial minorities can be shown to exist, the governmental interest in providing some sort of redress should be strong.

---

79. See Andreen, supra note 1, at 814.
80. See Brion, supra note 1, at 440, 498.
81. See id.
83. See infra notes 97-103 & accompanying text.
The governmental interest in enhancing the diversity of broadcasting licenseholders, particularly along racial lines, was rightly characterized as important by the Court in *Metro Broadcasting, Inc. v. FCC*. The governmental interest in spreading the benefits of broadcast licenses is plainly not significantly greater than the interest in more equitably spreading the burdens of hazardous waste disposal sites. As well, the potential for the sort of stigmatic injury discussed in Section III above can only be heightened when the community involved is one with a high percentage of racial and ethnic minority residents.

In addition, governments do not merely control the siting process. Governments, and the federal government in particular, are among the leading generators of the hazardous wastes, the burdens of which are racially maldistributed. If there is detectable unfairness in the ultimate distribution of the risks and costs of hazardous waste disposal sites, particularly along racial lines, governmental responsibility is profound and inescapable.

The crucial question, then, would seem to be whether, or to what extent, a detectable, systematic pattern of racial bias inheres in the national distribution of hazardous waste disposal facilities. Casual consideration of isolated cases by itself raises a certain degree of suspicion. Of course, isolated cases cannot be conclusive, or establish patterns, but their very concreteness may be instructive.

As it turns out, the nation's largest single hazardous waste disposal facility is the Emelle site in Sumter County, Alabama. Census figures do not present an encouraging picture of Sumter County in any obvious respect. In 1980, labor force participation among males over the age of sixteen stood at 59.6%. For every 100 workers in Sumter County,

---

85. See National Solid Wastes Mgmt. Ass'n v. Alabama Dept. Envtl. Mgmt., 729 F. Supp. 792, 797 (N.D. Ala.) (observing that the nation's largest hazardous waste landfill, located at Emelle, Alabama, accepts toxic wastes from, among other sources, "159 military bases and other federal agencies") rev'd on other grounds, 910 F.2d 713 (1990), modified on denial of reh'g, 924 F.2d 1001 (11th Cir. 1991).
86. Governments cannot minimize their responsibility simply by failing to approve new hazardous waste disposal facilities at a rate commensurate with the need for such space. Failing to approve new legitimate sites simply increases the rate of illegal, more dangerous disposal of hazardous waste. See Andreen, supra note 1, at 814; Bacow & Milkey, supra note 1, at 267; Delogu, supra note 1, at 200-01. Whether the illegal dumping of hazardous waste occurs with a less disproportionate racial impact than the legal disposal of such wastes may be subject to doubt.
there were 188 nonworkers. The percentage of families with no workers stood at 21.5%. Median household income in Sumter County was $9,185 per year, with per capita income at $4,383. The percentage of families below the government-established poverty line was 28.7%. It should be emphasized that these figures do not reflect the possible economic benefits associated with the genuinely long-term operation of the waste disposal facility; the facility was only beginning operation at roughly the time of the Census. The above figures may, however, be unfortunately relevant to explaining the choice of Emelle as the location of the facility. Crucial for the immediate purposes is the racial composition of the county at the time of siting. Of a total Sumter County population of approximately 16,900, 11,711 persons, or approximately two-thirds, listed themselves as black. This racial composition is unusual among Alabama counties.

Of course, a single instance, even an unusually important single instance, of a dramatic racial impact in the hazardous waste facility siting process does not establish any intended or unintended pattern. By way of a homely analogy, we would be reluctant to conclude that a particular coin is "biased" or "unfair" if heads turned up, say, three times in a row. After all, three heads in a row would be expected about once in eight trials, or about 12% of the time, with an unimpeachably fair coin.

Vivid individual examples, then, have their place. But for anything approaching a definitive test of the racial fairness of the hazardous waste siting process, we must, in the absence of outright admissions of

89. See id.
90. See id.
91. See id.
92. See id.
93. See id.
95. See 1980 Census, supra note 88, at 2-28, tbl. 58. After at least six years of authorized operation of the Emelle facility, the estimated Sumter County population had decreased slightly to 16,100. See 1990 Alabama Legal Directory 320. Again, this does not in itself suggest that the net economic impact of the facility has been negative; the trends might conceivably have been worse but for the employment opportunities afforded by the facility.
96. See 1980 Census, supra note 88, at 2-28, tbl. 58. For the record, in Sumter County at the time of the 1980 Census, black persons were approximately seven times as likely as white persons to be below 75% of the government-established poverty level. See id. at 2-493, tbl. 187. Approximately one-third of black persons in Sumter County fell into that category. See id.
racial animus from the relevant officials, consider a larger number of cases or trials. To continue the analogy, seven consecutive heads occurs by chance with a fair coin less than one percent of the time. Beyond a certain point, the logic of probability begins to suggest that the hypothesis of fairness is naive or disingenuous.

According to the best available evidence, that point has been reached in the hazardous waste facility siting process. Of the communities surrounding the nation’s five largest landfills accepting hazardous waste, the percentage of minority population is more than three times the national average. A GAO study of four landfills in the southeastern United States found a majority black population in three of the four communities.

Of course, however apparently striking the results, the number of “trials” in such an analysis is still small. We can increase the number of trials by considering other vaguely related indicia of disproportionate racial impact in connection with other sorts of hazardous waste facilities. If the focus is expanded to cover commercial hazardous waste facilities generally, whether they involve the treatment, storage, or disposal of such wastes, the racial pattern remains. For example, among communities nationally with one such facility, the racial and ethnic minority population percentage was twice that of communities without such facilities.

The number of “trials” involved, however, might be said to be irrelevant if any apparent racial burdening is merely an artifact of other considerations, such as socioeconomic status or urban versus rural residence. Perhaps there is no legally cognizable racial invidiousness in siting facilities, in part, in accordance with wealth and poverty, or urban versus rural status, even if these dimensions are correlated with race. The Supreme Court has, in other contexts, accepted analogous arguments, though not without dissent.

On the evidence, however, race does matter independently of socioeconomic status or the rural-urban dimension. It has been concluded, on the basis of broad consideration of hazardous waste facilities of

98. See Lee, supra note 97, at 43-44.
99. See id. at 45.
100. See generally the opinions of Justice Stevens for the Court and Justice White in dissent on the problem of how to respond judicially to a substantial overlap between suspect and non-suspect classifications in New York City Transit Auth. v. Beazer, 440 U.S. 568, 587-94, 602-11 (1979).
various types, that race is in fact the most significant variable. Specifically, "[a]lthough socioeconomic 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."

It might still be asked, in the face of all of this directly and indirectly related evidence, whether it is reasonable to suppose that disparities in the racial impact of hazardous waste disposal facility siting could still be due to chance. All that can be said on this score, however, is that the various national findings referred to above would occur by chance "with a probability of less than 1 in 10,000." We do not normally guide our lives by betting on one in ten thousand chances.

Some persons may, however, still be suspicious of mere statistics, even if the statistics or probabilities can be deemed conclusive to a moral certainty. It is appropriate to ask in response, though, what other reasonably obtainable evidence would suffice to establish elements of racial discrimination in the hazardous waste disposal facility siting process. The decentralized nature of the siting process is such that no single person or group of persons contributes to more than a few siting decisions. It is thus impossible for any set of decisionmakers to admit personally to a pattern of discrimination. Given the typically unconscious or rationalized character of much racial discrimination, it is unlikely that even an admission of discrimination regarding any individual site will be forthcoming.

The general unavailability of any admissions of conscious, intended racial discrimination in the siting process, then, requires us to choose between relying on the best available statistical evidence, or ignoring the problem of racial discrimination as insufficiently documented. To press the coin-tossing analogy, it is as though we were interested in the fairness or unfairness of a coin, but were unable, for practical reasons, to "directly" investigate the fairness of the coin. Even if we could not directly examine, say, whether one side of the coin was curved, or was heavier than the other, we would not hesitate to pronounce the coin unfair through an "indirect" examination. Specifically, if we tossed

101. See Lee, supra note 97, at 45.
102. Id.
103. Id. at 45-46.
104. The twenty-seven communities with the largest commercial hazardous waste landfills are found in sixteen different states, with some facilities beginning operation a quarter century before others. See CHAVIS & LEE, supra note 94.
the coin enough times, and obtained a sufficiently distinctive count of heads and tails, so that we could say that the observed disparity between heads and tails could occur only one in ten thousand times, we would likely surrender our agnosticism, and conclude that the coin is, in all likelihood, unfair.

The Supreme Court, however, has taken a somewhat more fastidious approach to certain cases. In racial discrimination cases, as it were, we must be concerned not merely with the fairness of the coin, but with whether the coin was, by design, intended to be unfair. Thus discriminatory intent, beyond discriminatory impact, must be proved to establish an equal protection violation.\textsuperscript{106}

It remains true, though, that to some degree, intent to discriminate may be inferred from racially disproportionate consequences. As the Court has observed:

\begin{quote}
[A]n invidious discriminatory purpose may often be inferred from the totality of the relevant facts, including the fact, if it is true, that the law bears more heavily on one race than another. It is also not infrequently true that the discriminatory impact . . . may for all practical purposes demonstrate unconstitutionality because in various circumstances the discrimination is very difficult to explain on nonracial grounds.\textsuperscript{107}
\end{quote}

The Supreme Court has, however, occasionally been reluctant to infer the requisite discriminatory intent from an overall pattern of effects generated by multiple, uncoordinated decisions. In \textit{McCleskey v. Kemp},\textsuperscript{108} for example, a black petitioner who received the death penalty for killing a white police officer during a store robbery challenged the capital sentencing process as racially discriminatory in practice. The petitioner relied on a large and technically sophisticated study concluding, among other things, that at the relevant times, black defendants convicted of killing white victims were disproportionately likely to receive the death penalty.\textsuperscript{109}

\begin{footnotes}
\item[107] \textit{Washington}, 426 U.S. at 242; see also id. at 253 (Stevens, J., concurring) (" Frequently the most probative evidence of intent will be objective evidence of what actually happened rather than evidence describing the subjective state of mind of the actor. . . . This is particularly true in the case of . . . compromise, of collective decisionmaking, and of mixed motivation.").
\item[109] Id. at 286-87.
\end{footnotes}
The Court, however, concluded that the study in question, apart from further evidence specific to the petitioner’s own case, did not establish an equal protection violation.\textsuperscript{110} While rejecting the petitioner’s claim, the Court reiterated its prior rule that “statistical proof normally must present a ‘stark’ pattern to be accepted as the sole proof of discriminatory intent under the Constitution.”\textsuperscript{111}

It would not be unreasonable to distinguish the study in \textit{McCleskey} from those in the hazardous waste facility area on grounds of “starkness.” This is not at all to impeach the death penalty studies. One can, however, argue that their magnitude and clarity of results do not equal that of the hazardous waste studies.

The death penalty studies indicate that when controlling for thirty-nine nonracial variables, “defendants charged with killing white victims were 4.3 times as likely to receive a death sentence as defendants charged with killing blacks.”\textsuperscript{112} Less starkness is apparent, however, at the general level of the race of the defendant. At the level of raw numbers, “4% of the black defendants received the death penalty, as opposed to 7% of the white defendants.”\textsuperscript{113} Of course, raw numbers may mask systematic injustices against minorities in the sentencing process. When a number of nonracial variables were controlled for, “black defendants were 1.1 times as likely to receive a death sentence as other defendants.”\textsuperscript{114}

It is thus reasonable to conclude that the racial disproportionality is starker in the hazardous waste area than in the death penalty area.\textsuperscript{115} Again, this is not to defend the result in \textit{McCleskey}, or the Court’s dismissal of the death penalty studies. Neither is ultimately defensible. But if the Court continues to insist on starkness, the hazardous waste results are evidently starker.

The Court has expressed some concern about exclusive reliance upon statistical evidence, however apparently conclusive, where the party against whom the statistical case is built has no opportunity to rebut the evidence of discrimination by explaining the statistical disparity.\textsuperscript{116}

\begin{itemize}
  \item \textsuperscript{110} \textit{Id.} at 291-99.
  \item \textsuperscript{111} \textit{Id.} at 293. A somewhat less demanding standard has been adopted in certain other contexts, such as jury selection and Title VII civil rights claims. See \textit{id.} at 293-94.
  \item \textsuperscript{112} \textit{Id.} at 287.
  \item \textsuperscript{113} \textit{Id.} at 286.
  \item \textsuperscript{114} \textit{Id.} at 287.
  \item \textsuperscript{115} It might also be noted that above a certain level of aggravation of circumstances associated with the killing, the racial effects are apparently washed away. See \textit{id.} n.5. It is not clear that there are any such comparable ranges of cases in the hazardous waste area.
  \item \textsuperscript{116} See \textit{id.} at 296.
\end{itemize}
Doubtless statistical evidence should not be treated as sacrosanct. But insisting upon an opportunity for the relevant decisionmakers to attempt to rebut the statistical evidence is, in the hazardous waste context, not incompatible with a trial on the merits of the equal protection claim.

There should be no confusion, though, about what form that rebuttal evidence must take. In the hazardous waste context, the statistical evidence cannot be rebutted merely by the testimony of hundreds of individual, independent decisionmakers to the effect that each acted without racial animus. The point of the statistical evidence is to show that regardless of all those independent subjective beliefs, the aggregate result is simply unexplainable on any rational basis not taking race into consideration as a major element. The statistical evidence itself must be rebutted, perhaps as technically flawed or equivocal, or as compatible with a plausible alternative nonracial interpretation.

This discussion has not exhausted the relevant differences between statistical evidence of disproportionate racial impact in the death penalty context and the hazardous waste site context. There is a sense, for example, in which for McCleskey to prevail, he must show racial discrimination in his individual case, rather than a statistical tendency toward racial discrimination over a run of cases. But the argument in the hazardous waste context need not focus on any particular siting case. The essence of the equal protection violation in the hazardous waste context is the overall pattern of distribution. That pattern can be rectified, at least prospectively, without accusing any particular decisionmaker in any particular case of conscious or unconscious racism.

The decision in a hazardous waste siting case is always racial in a sense in which a capital punishment case need not be. The actual choice in any capital case is never in and of itself racially comparative. It is instead a matter of whether this particular defendant, of a particular race, should, under these circumstances, be condemned or not. In contrast, the hazardous waste siting decision is typically, if not invariably, at least implicitly racial. Potential sites differ as to their racial composition. Among the minimally technically qualified potential sites, should a site with a greater, or lesser, minority population be chosen?

Further, one might argue that while there is inevitably broad discretion in the criminal conviction and capital sentencing context, the criminal process has been hedged about by procedural safeguards to make the process as fair as possible. Whatever the strength of this

contention, the hazardous waste facility siting process, however open, public, and democratic, is not constrained to the same degree by procedural safeguards intended specifically to ensure that racial and ethnic minorities are not disproportionately burdened in particular cases or in the aggregate.

Finally, it may be possible that the McCleskey Court was fearful that accepting the statistical evidence in that case would inevitably undermine all capital punishment in the State of Georgia.119 From the perspective of the Court majority, this would presumably be an undesirable consequence. The equal protection argument in the hazardous waste siting process context, however, offers no comparable undesirable outcome. Hazardous waste will inevitably be disposed of, legally or illegally. This article has argued that the Equal Protection Clause requires that the overall net burdens of such disposal not fall disproportionately upon racial minorities. To the extent that non-minority communities perceive that the chances that hazardous waste may be disposed of in their own communities would be increased under such a rule, there may be desirable consequences. Among these might be at least minimally enhanced public pressure to develop cost-effective ways of reducing the volume and toxicity of hazardous wastes, perhaps along with improved containment systems.

V. CONCLUSION

The most important effects of hazardous waste disposal facility siting decisions should not escape serious judicial scrutiny merely because those siting decisions are made in a decentralized fashion by a shifting mix of governmental decisionmakers. Federal and state governments should not be permitted to evade responsibility merely because a number of independent governmental and private actors have some role in the siting process.

In particular, relief under the Equal Protection Clause may be appropriate in extreme cases when communities or states are asked to bear uncompensated net burdens of such a nature and magnitude that the community or state suffers stigmatic injury. Relief in such cases, perhaps in the form of requiring an increase in the number and dispersion of disposal sites, would not only comply with the dormant Commerce Clause, but would in fact materially advance the clause's underlying purposes.

119. See id. at 367 (Stevens, J., dissenting).
More clearly, equal protection-based relief should be available in appropriate cases where the overall distribution of hazardous waste sites cannot rationally be explained except, in substantial part, upon the basis of the racial or ethnic minority composition of the communities most directly affected. In principle, statistical evidence may be sufficient to establish the necessary discriminatory intent of the governmental defendants. Generally, the relief involved will be injunctive and prospective, broadly requiring greater numbers and a greater variety of communities among the sites actually selected from all those prospective sites meeting minimal technical criteria. As the number and variety of communities bearing some responsibility for the disposal of hazardous wastes increases, any stigmatic injury associated with such communities may be reduced, along with a more direct reduction in the disproportionate racial burdening currently evident.