

## C

**Green Bag**  
Summer 2000**Article****\*353 WASTE & THE DORMANT COMMERCE CLAUSE - A REPLY**

Jonathan H. Adler

Copyright © 2000 **Green Bag**; Jonathan H. Adler

IN WASTE s the Dormant Commerce Clause, [\[FN1\]](#) Professor **Richard** Epstein suggests that unobstructed interstate commerce is not always such a good thing. Curiously departing from the libertarian leanings that guide most of his work, Epstein cites externalities as a justification for a departure from the default rule against barriers to interstate trade. His argument challenges the practical value of the dormant commerce clause's prohibition on state obstructions to interstate commerce in "bads." In particular, Epstein suggests that *City of Philadelphia v. New Jersey* [\[FN2\]](#) and subsequent Court decisions [\[FN3\]](#) invalidating state efforts to limit or suppress shipments of out-of-state waste have produced less-than-optimal results. All may not be right with waste markets, but the alternative Epstein proposes would be worse.

I have no quarrel with Epstein's characterization of the Supreme Court's dormant commerce clause jurisprudence. The Court's shifting coalitions provide a poor foundry for the forging of doctrinal consistency. Left alone for decades, it becomes increasingly difficult to restore a doctrine's textual moorings. But I must object to Epstein's suggestion that applying the Court's default rule against protectionist and exclusionary state regulations to interstate commerce in "bads" generates substantial uncompensated losses that nondiscriminatory measures are unable to address. Allowing buyers and sellers to exchange money for goods and services generates a positive \*354 sum game even when the provision of the desired good or service generates an imperfectly controlled externality. This is as true for waste as it is for widgets. The arguments Epstein marshals against the dormant commerce clause's nondiscrimination norm, if accepted, can be applied with equal force against all manner of products that are sold across state lines. All economic activity is capable of generating externalities, and not all externalities are, or will be, controlled. Yet this provides no basis for compromising free trade principles. The empirical operation of waste management markets suggests Epstein's concerns are unwarranted; the theoretical failings of an unobstructed national market in waste management services have not materialized. Epstein's thesis, while provocative, does not undermine the value of the nondiscrimination default rule that underlies current dormant commerce clause jurisprudence.

Taking the "Goods" with the "Bads" The mutual gains from trade provide the economic justification for the dormant commerce clause. Keeping the channels of interstate commerce clear of state-erected obstructions benefits the nation by enlarging the number of positive-sum exchanges which can occur. Allowing states to erect protectionist barriers risks economic balkanization and substantial wealth foregone. For this reason, the Supreme Court has voided protectionist state measures time and again.

Epstein readily accepts this formulation in the context of "goods," that is those items for which individuals and communities are willing to exchange money. In the context of "bads," however, and waste in particular, Epstein is not so sure that the free trade principles should apply. The analytical distinction between "goods" and "bads" is not as clear as Epstein implies. For one thing, one man's trash is another's treasure. Many items that are disposed of as waste in one sector of the economy are reclaimed and recycled elsewhere as a good. [\[FN4\]](#) For another, commerce in waste (a "bad") can just as easily be conceived as

commerce in waste management services (a "good"). The economics are the same. The only difference is the reversal of the flow of physical material. Such a difference hardly justifies a new legal doctrine.

Epstein suggests that one reason for limiting the importation of out-of-state waste is that waste disposal capacity is a scarce resource, and that the importation of waste will make it more difficult for local residents to dispose of their own waste. Allowing a national market, Epstein argues, "strains local facilities" and prevents local economies from maintaining a "balance" between waste management supply and demand. [\[FN5\]](#) This argument implies that an autarky in waste disposal services might be preferable to the current free trade regime. Yet encouraging self-sufficiency in waste management makes no more sense than calls for any other sort of economic isolation. As James DeLong observes, there is no more basis for insisting that New Yorkers dispose of all their trash within the state than there is for mandating that they grow all their \*355 vegetables in Central Park. [\[FN6\]](#)

Consider the implications of Epstein's thesis were it applied to the production of steel. Assume that a local steel plant meets all of the local community's need for steel. If that plant is allowed to sell steel to other communities as well, the home community will now face greater competition in seeking to purchase steel. In the short run, the home community may have a harder time meeting its needs as out-of-state purchasers drive up the price and consume this "scarce" resource. Does this justify a limitation on the nondiscrimination rule? Of course not.

None of us fears that allowing local steel mills to participate in national markets risks a steel shortage. Indeed, we expect existing producers to expand production, or new producers to enter the market. We also expect specialization in a national market to increase productivity and reduce the marginal costs of production, benefitting local communities and out-of-state purchasers alike. Insofar as there are economies of scale in steel production, we would also expect a larger steel plant serving a larger market to meet market demands at a lower per-unit price than small, localized mills in each community. In short, allowing a national market in steel benefits the home community just as it benefits those out-of-state that wish to purchase the good.

The same can be said for waste disposal. As demand increases, private firms will respond by increasing waste management capacity. In addition, the economies of scale in waste management decisively favor larger facilities, which can provide waste management services at substantially lower costs (and superior environmental performance) than the town dumps of yore, even when long-distance hauling costs are included. Indeed, modern regional "megafills" can handle waste at less than one-third the cost of older local landfills. [\[FN7\]](#) This explains why the citizens of Charles County, Virginia - when given the choice - opted to host a regional landfill rather than a local one. [\[FN8\]](#) As a practical matter, limiting interstate trade in waste management services is likely to force all communities to pay more for disposal. Balkanizing trade increases the costs to all involved. Noting there are regulatory obstacles to the siting of new landfills or other disposal facilities proves nothing at all, for new steel mills and other productive facilities must also run "a gauntlet of regulation from every level of government." [\[FN9\]](#)

Waste is hardly the only "bad" that could be impacted by Epstein's proposal. The Mayo Clinic in Rochester, Minnesota, is open to patients from around the nation. It can be viewed as a participant in a market for "goods" (health care services) or "bads" (illness). The provision of its services to all comers, irrespective of their origin, serves as a magnet for "bads," in this case sick people instead of waste. Under Epstein's analysis, allowing the clinic to serve out-of-state patients at the same rates as locals is bad for residents of Rochester, who now face competition in seeking to meet their own medical needs with "scarce" local resources. They even face the potential of uncompensated externalities in the form of contagious disease. Does this mean that the state of Minnesota should be allowed to \*356 impose a differential tax on the ill and infirm with the misfortune to live outside of the state? I would hope not.

### The Problem with Externalities

Epstein's primary justification for legislation to authorize states to deviate from the nondiscrimination norm is the presence of externalities. In Epstein's words, "waste creates losses." [\[FN10\]](#) Yet this is true of all economic activity, particularly production. Gold mining, hog farming, and semiconductor production are all capable of generating externalities as great, if not greater, than the average landfill. [\[FN11\]](#) That an activity generates externalities, and that these externalities may not be perfectly controlled by government regulation of common law nuisance remedies, is hardly cause for limiting interstate commerce. Indeed, limiting commerce is a rather indirect and inefficient means of addressing externality concerns, particularly when more direct and non-discriminatory means are available, ranging from direct government regulation or fee systems to nuisance law.

In theory, the present nondiscrimination default rule could increase the local externalities generated by waste management as facilities increase in size. A larger landfill might generate more odors or greater levels of groundwater contamination. [\[FN12\]](#) To Epstein, this is cause for concern because the importing state is subject to a greater level of externalities than would be generated by that state's waste alone. But once again we must ask whether the production of goods is any different. That a community may be subject to increased particulate emissions from the operation of a steel plant is no argument for limiting interstate commerce in steel.

As a general rule, a small steel mill that only produces steel for local use will impose fewer externalities than an equivalent, albeit larger, mill that produces steel for a national market. As market specialization increases, it may well be that steel production becomes concentrated in a small handful of communities that become subject to a wide array of environmental effects. Woburn, Massachusetts, for example, suffered substantial water contamination in no small part because it was home to numerous tanneries that served a national market. The proper response to these concerns is for the home states, or the home communities, to adopt policies that control the externalities of steel production without erecting discriminatory barriers to commerce, insofar as the steel mills do not already compensate the local communities with offsetting benefits.

\*357 In *Dean Milk Co. v. Madison*, as Epstein recounts, the Supreme Court voided an ordinance that imposed a local bottling requirement on all pasteurized milk sold in the city. [\[FN13\]](#) Although the city claimed a public health rationale for the ordinance, the Court struck it down, citing the availability of "reasonable nondiscriminatory alternatives." [\[FN14\]](#) Whether milk is safe to drink has little to do with whether it is bottled within five miles of downtown Madison, Wisconsin. By the same token, the noxiousness or toxicity of waste has absolutely nothing to do with how far it travels. If local communities are subjected to externalities for which they do not receive compensation - a debatable proposition as discussed below - they are fully capable of imposing restrictions on waste management within their jurisdictions, or even prohibiting it altogether. Nothing in the dormant commerce clause requires any state to permit any waste disposal within its borders.

There is also something incongruous in arguing that states that fail to adopt nondiscriminatory measures to control pollution problems should be "rewarded" with the power to enact economically harmful, if politically popular, restrictions on interstate commerce. By what faith should we assume that states are likely to enact optimal restrictions on out-of-state waste shipments if they are unable to adopt optimal, or even passably sufficient, protections for local citizens? If anything, we would expect states to do a better job at enacting and implementing local regulatory regimes due to the prevalence of local knowledge and because those that bear the costs of the regulatory regime are reasonably close to those who reap the benefits. Discriminatory trade restrictions, on the other hand, impose a substantial share of their costs on outsiders, reducing the check on excessive government intervention.

A far greater legal scholar than I has argued that there is no need to address cases in which property owners pollute their own lands. [\[FN15\]](#) By the same token, there is no cause to empower state governments to second guess the decision of private

landowners or, as is more likely the case given existing zoning and land-use regimes, local communities to host waste management facilities in return for economic compensation. Insofar as the facility imposes uncompensated harms, the locals have every incentive to address them. "Where pollution harms its creator, a built-in mechanism of self-correction limits its extent. The polluter bears both the benefits and the costs of pollution and has every incentive to maximize the net benefits from the use of the land." [FN16] By the same token, when a local community negotiates with a waste management company over siting a new facility, it is more likely than any other party to ensure that concerns about local harms are addressed. There is no reason to fear a "race to the bottom" in the siting of waste management facilities. [FN17]

Speaking of great legal scholars, Ronald H. Coase, in *The Firm, the Market, and the Law*, explained why "the mere existence of \*358 'externalities' does not of itself provide any reason for governmental intervention," as such externalities are "ubiquitous." [FN18] Coase noted that, because government action itself entails costs, the existence of identifiable externalities should not by itself justify government intervention. [FN19] In an open market, those communities that are subject to the externalities of waste disposal are likely to be compensated for any harms to which they are subject. Even if they are under-compensated, it is doubtful that governmental limitations on interstate trade in waste management services would generate sufficient gains to offset the resulting economic losses.

Getting Down s Dirty Even if one were to accept in theory (as I do not) that "the free movement of waste across state boundaries need not have the same desirable overall consequences as the free shipment of goods," [FN20] it makes little sense to abandon the presumption against state protectionism when a wealth of empirical evidence can be brought to bear. Stories on the horrors of waste may well be "legion," but the reality is much more mundane. Waste is handled without difficulty throughout most of the nation. Where problems exist, state intervention - not an unconstrained market - is typically to blame.

[FN21] The non-discrimination norm has yielded tremendous benefits to exporting and importing states alike.

America generates approximately 200 million tons of municipal solid waste per year. This may seem like quite a bit - enough to fill a convoy of garbage trucks reaching halfway to the moon according to the Environmental Protection Agency [FN22] - but all this waste can be readily managed without much difficulty at all. Indeed, at current rates, a single 300-foot-deep landfill less than 30 square miles in area could handle all the municipal solid waste generated in this nation for the next thousand years. [FN23] In other words, all the land that is required to contain a millennium's worth of garbage would consume less than one-tenth of one percent of the continental United States. The deployment of existing compaction and land reclamation techniques could reduce the required area even further, as will advances in recycling and source reduction.

Such reassuring information is broadcast infrequently: "world won't end tomorrow" rarely makes the evening news, while apocalyptic scenarios are broadcast with regularity. The late 1980s saw numerous reports of a waste disposal "crisis"; *Newsweek*, for one, claimed Americans would be "Buried Alive" by a mountain of garbage. [FN24] Existing landfills were closing, and few new facilities were opening to take their place. Like many tales of impending environmental doom, these tales were much ado about nothing. The number of landfills was declining in the 1980s, but capacity was expanding. The economies of scale in the waste management industry began to favor \*359 larger facilities, a trend that was reinforced by tightened regulatory requirements on waste disposal. Local dumps, the sort of noxious, smelly facilities that dominated the waste management industry for years, were rapidly being displaced by modern sanitary landfills that entomb wastes for centuries. As noted above, these economies of scale benefit consumers by reducing the marginal economic costs of waste disposal services, but they reduce the marginal environmental costs as well. It is easier to monitor and control the externalities of a few larger facilities than thousands of local dumps.

Solid waste that is exported from one state to another may be a relatively small portion of all the waste generated - less than 10 percent in 1997- but nearly every state is both an importer and an exporter of waste. [\[FN25\]](#) These markets are also highly dynamic. A net-importing state one year will not necessarily be a net importer the next. Indeed, the Supreme Court's definitive application of dormant commerce clause principles to solid waste arose from a suit by New Jersey to prevent the importation of waste from Pennsylvania. Today, the waste flows in the opposite direction, and Pennsylvania is one of the largest waste importers in the nation. [\[FN26\]](#)

Because the viability of larger facilities is partly dependent upon access to larger markets, it actually has become easier for local communities to dispose of locally generated wastes, with less environmental harm, than it would have been had the Supreme Court endorsed the balkanization of waste disposal markets or had Congress enacted the policies Epstein suggests. In other words, to the extent we can tell, unimpeded interstate commerce in waste management services has not led to "system-wide national shortages of waste disposal sites." [\[FN27\]](#) Perversely, state protectionism, and the consequent welfare losses, could have just that effect.

What Uncompensated Harms? Epstein paints a picture of poor, set-upon communities burdened by the presence of externality-spewing waste management facilities. These communities, in Epstein's analysis, are subject to the "uncompensated harm" of having to dispose of others' waste. [\[FN28\]](#) Interestingly enough, many of these communities do not feel the same way. Many local communities across the nation welcome modern waste management facilities as a source of jobs, tax revenue, and economic development as eagerly as they would a new automobile plant or office building. Whatever externalities are involved, these communities feel that they are well compensated for their trouble. Occasional abuses, facilitated by inadequate protection of property rights against nuisances and state expropriations, is no reason to jettison the system. Moreover, nothing Epstein proposes in his article would address these concerns. If anything, by limiting waste disposal options, they will make these problems worse as political entities feel more compelled to impose waste "solutions" on local citizens.

There are communities infected by a NIMBY (Not-In-My-Backyard) attitude toward waste disposal. But this is true for factories and office buildings as well. Few, if any, forms of development are universally welcome in every community across the land. All forms of development produce measurable externalities. It is impossible \*360 to know ex ante whether there will be sufficient offsetting benefits to compensate the host community in each isolated case. But I would think that Epstein would agree that the sentiment of the community itself - and not the political interests of state-wide elected officials - is a reasonable indicator of whether the externalities are adequately controlled or compensated. After all, where the costs of a given activity are borne by the parties that reap the benefits, there is no cause for government intervention, particularly when there is consent.

Host communities today receive millions of dollars for schools, infrastructure, tax relief, and environmental monitoring that more than offset any externalities that the facilities produce. [\[FN29\]](#) They are also more involved in siting decisions than in the past when many older, and more polluting, facilities were created. As a result, the market for "hosting" landfills and other facilities is highly competitive, such that some communities that desire such facilities are left out and those in which facilities are sited are heavily compensated. Limiting the importation of waste from other states, however, puts these benefits at risk.

That there is political opposition to waste importation does not mean it is motivated by a general concern about externalities

in host communities. As Epstein himself acknowledges, much of the political opposition to the interstate waste trade is focused on the transportation of waste, not its eventual disposal. [\[FN30\]](#) Governor Christie Whitman of New Jersey assailed New York Mayor Rudolph Giuliani's plan to send waste south on I-95 even though it was headed for Virginia. In Virginia itself, where I live, there is substantial opposition in much of the state to the importation of trash from New York and other places (but especially New York). Yet most of this opposition is against the transportation of waste through communities that are not direct recipients of the waste disposal fees; little opposition comes from the communities where the waste is destined to end up. This issue has played out like environmental justice in reverse: Poor, disproportionately minority communities feel that the economic benefits of hosting modern sanitary landfills more than outweigh the externalities in those communities. Virginians who oppose garbage barges from the Big Apple seem more concerned about the "status" implications of accepting New York's waste than the purported externalities faced by local residents.

New Jersey and non-host communities in Virginia could plausibly argue that interstate transportation of waste creates externalities for which the states' residents are not directly compensated. Epstein dismisses this concern, however, as New Jerseyans, like the rest of us, are compensated indirectly by the maintenance of unimpeded interstate transportation of goods. While I share this view, it is hard to square with Epstein's underlying analysis, for the externalities generated by waste transportation are more severe, and less likely to be directly compensated for, than those of disposal itself. Of course, in the case of transportation, as with disposal itself, externalities can be more effectively addressed through direct, non-discriminatory regulation. There is no need to abandon free trade.

No Solace at Home or Abroad Epstein seeks "strong evidence" for his position in the circumstances that led to the passage \*361 of the Low-Level Radioactive Waste Policy Amendments (LRWPA), but it is not there. The LRWPA were initially enacted in 1980 when one of the nation's few disposal facilities for this sort of waste announced it would cut the volume of waste it accepted in half. This led to concerns that disposal capacity for low-level radioactive waste would rapidly disappear. Rather than allow a market response, in the form of higher disposal prices that would drive down waste generation and encourage the creation of additional supply, the governors banded together and sought to have Congress impose a solution upon them.

An "anticipated shortage" in disposal facilities almost led to the enactment of a national regulatory regime for the management of solid waste as well. As we have seen, the "crisis" was ephemeral, and the marketplace - aided by the nondiscrimination default rule - "operated in the sensible fashion postulated by its defenders." [\[FN31\]](#) There is no reason to believe that the situation with low-level radioactive waste would have been any different had Congress simply stayed its course. As it happened, the LRWPA, by pushing states to create their own sites, is leading to a surplus. Less than 40,000 tons of low-level radioactive waste is produced each year. [\[FN32\]](#) This is about how much trash a small landfill can handle. As a result, a single site could meet the nation's needs. The only reason for multiple sites is to reduce the externalities generated by transport. Yet, as Epstein concedes, such concerns cannot justify a departure from the nondiscrimination default rule.

Nor is there reason to believe that low-level radioactive waste is fundamentally different from the more mundane waste that pours into most landfills. As wastes become more dangerous, or are perceived as such by the public at large, the costs of disposal will increase until the waste-generating communities and companies are willing to compensate recipient communities enough for the risks and costs of disposal. In the alternative, waste generators will simply produce less waste, and indeed this has occurred as the cost of disposal has increased. [\[FN33\]](#) Increased disposal costs will also induce the entry of new disposal firms. A private firm in Utah sought to do just that by converting a uranium mill tailing disposal site into a low-level radioactive waste facility. Interestingly enough, the operator of an existing disposal site sued to stop it. [\[FN34\]](#) This is further



evidence that any shortage of disposal space is political, and not economic, in origin.

Even were low-level radioactive waste a special case, this would hardly justify discarding the presumption that states should be barred from discriminating against out-of-state "bads." Radioactive waste represents but a miniscule fraction of the "bads" voluntarily exchanged across state lines. Carving out an exception for such extreme cases would do far less damage to national markets than the proposal which Epstein suggests. Yet even this may concede too much, as the history of low-level radioactive waste disposal suggests, where interstate markets are allowed to work, there is little cause for such interventions.

In closing, Epstein curiously points to the experience of the European Union to reinforce his suggestion that interstate commerce in waste services is different than that in widgets. It is true that the E.U. has adopted principles that encourage states to manage their own waste, but this hardly reinforces the case for discrimination. The "self sufficiency" that the \*362 E.U. seeks to encourage is part of a larger regulatory system that holds companies responsible for the eventual disposal of the products that they sell. This system, while it has some eco-populist appeal, is notorious for its economic insanity and inefficiency. [FN35] More importantly, the E.U. is hardly a paragon of unregulated commerce, and has embraced "precautionary" restrictions on trade in all sorts of unqualified goods to satisfy protectionist and ideological impulses. That the E.U. has also taken steps toward an autarkic waste management regime, if anything, suggests that my friend has strayed quite far off course.

- In the end, Richard Epstein's analysis of interstate commerce in waste is questionable on analytical and empirical grounds. A doctrine which disposes of the default rule out of putative concern for insufficiently addressed externalities is untenable. Such an approach to interstate commerce undermines the default nondiscrimination rule for "goods" as surely as it does for "bads." The unpleasant nature of waste disposal should not obscure the fact that autarky is economically wasteful and socially unwise. A dormant commerce clause doctrine that maintains an unobstructed national market in all manner of goods and services may be textually unsound, but it is economically and environmentally wise. Robust interstate markets in waste management services provide abundant benefits, even to those left holding the trash **bags**. Allowing states to restrict the flow of garbage at their borders would be a exercise in wasteful lawmaking.

AUTHOR NOTE: Jonathan H. **Adler** (jhadler@earthlink.net) is a senior fellow in environmental policy at the Competitive Enterprise Institute, and the editor of *Ecology, Liberty & Property: A Free Market Environmental Reader* (2000). Jeffrey B. Clark, Michael Greve, Sam Kazman, and Angela Logomasini provided helpful comments on an earlier draft.

[FN1]. **Richard A. Epstein**, [Waste & the Dormant Commerce Clause](#), 3 **GREEN BAG 2D** 29 (1999).

[FN2]. [437 U.S. 617 \(1978\)](#).

[FN3]. See, e.g., [Oregon Waste Systems v. Department of Environmental Quality](#), 511 U.S. 93 (1994); [Chemical Waste Management v. Hunt](#), 504 U.S. 334 (1992).

[FN4]. It is not sufficient to simply claim that those items which are, or can be, reclaimed are no longer "bads," as many such goods can generate the sorts of externalities with which Epstein is concerned. Indeed, the Environmental Protection Agency has sought to regulate many residuals as waste despite their potential for reuse. See, e.g., [Association of Battery Recyclers v. EPA](#), 208 F.3d 1047 (D.C. Cir. 2000). Moreover, treating "bads" differently than "goods" can prevent today's "bads" from ever being put into productive use as "goods" in the future. See, e.g., Jonathan H. Adler, *The Hazards of Regulating Hazard-*

ous Waste, REGULATION (Spring 1993).

[FN5]. Epstein, supra note 1, at 35-36.

[FN6]. James V. DeLong, Of Mountains and Molehills: The Municipal Solid Waste "Crisis", BROOKINGS REV. 34 (Spring 1994).

[FN7]. In 1994, the National Solid Waste Management Association estimated costs of \$50 to \$100 per ton for a 250-ton-a-day landfill, and only \$14 to \$30 per ton for a 3,000-ton-a-day landfill. DeLong, supra note 6, at 36.

[FN8]. Angela Logomasini, Trashing the Poor: The Interstate Garbage Dispute 3 (Competitive Enterprise Institute, August 1999).

[FN9]. Epstein, supra note 1, at 36.

[FN10]. Epstein, supra note 1, at 35.

[FN11]. Indeed, the operation of modern landfills, as opposed to old-fashioned dumps or even older landfills such as New York's infamous Fresh Kills, produces relatively minimal externalities to host communities. A study of landfills in operation in 1991, many of which were not yet subject to existing regulatory standards, found that only 5 percent of landfills in operation at the time posed a one in 100,000 or greater risk of cancer; 60 percent of landfills posed only a one in ten billion risk. Nearly all modern landfills fall in this latter category. See Jennifer Chilton & Kenneth Chilton, A Critique of Risk Modeling and Risk Assessment of Municipal Landfills Based on U.S. Environmental Protection Agency Techniques, 10 WASTE MGMT. & RES. 505 (1992).

[FN12]. On the other hand, the economies of scale of waste management are such that larger operations are more able to afford more effective pollution control and monitoring systems. One can also presume that, as a general rule, a large corporation operating a regional megafill is more likely to have the resources to purchase and maintain buffer zones than a small, neighborhood dump. As a practical matter, the age of a landfill is a greater determinant of whether it imposes substantial externalities on local communities than its size.

[FN13]. [340 U.S. 349 \(1951\)](#).

[FN14]. [Id. at 354](#).

[FN15]. See generally, Richard A. Epstein, Nuisance Law: Corrective Justice and Its Utilitarian Constraints, 8 J. LEG. STUD. 49 (1979).

[FN16]. RICHARD A. EPSTEIN, SIMPLE RULES FOR A COMPLEX WORLD 277 (1997).

[FN17]. There is a wealth of recent scholarship debunking the "race to the bottom" thesis in the context of environmental policy. This scholarship is summarized in Jonathan H. Adler, [Wetlands, Waterfowl, and the Menace of Mr. Wilson: Commerce Clause Jurisprudence and the Limits of Federal Wetlands Regulation](#), 29 ENV. L. 1, 42-47 (1999). The seminal article on this subject is **Richard** L. Revesz, [Rehabilitating Interstate Competition: Rethinking the 'Race-to-the-Bottom' Rationale for Federal Environmental Regulation](#), 67 N.Y.U. L. REV. 1210 (1992).

[FN18]. R.H. COASE, THE FIRM, THE MARKET, AND THE LAW 26 (1988).



[FN19]. Indeed, Coase went further, suggesting the ubiquity of externalities justified "a prima facie case against intervention." *Id.*

[FN20]. Epstein, *supra* note 1, at 36.

[FN21]. So-called "flow control" statutes, for example, disrupt recycling markets by diverting recyclable materials to privileged facilities. See, e.g., Jonathan H. Adler, *The Failure of Flow Control, REGULATION* (Spring 1995). Hazardous waste regulations can also be a substantial barrier to the recycling and reuse of hazardous wastes. See Adler, *supra* note 4.

[FN22]. A. Clark Wiseman, *Government and Recycling: Are We Promoting Waste?*, 12 *CATO J.* 443, 444 (1992) (citing a 1989 EPA report).

[FN23]. *Id.* at 445.

[FN24]. *Buried Alive!*, *NEWSWEEK* cover (November 29, 1989).

[FN25]. Environmental Industry Associations, *Interstate Transport of Waste Materials*, available at <<http://www.envasns.org/eii/garbage/Interstate/facts&f1.html>> (visited April 28, 2000).

[FN26]. A 1988 government study predicted that Pennsylvania faced a solid waste crisis because so many of its landfills were closing.

[FN27]. Epstein, *supra* note 1, at 37.

[FN28]. *Id.* at 36.

[FN29]. For a sampling of communities that have benefited from hosting waste management facilities see Rex Springston, *Trash Means Cash to Counties*, *RICHMOND TIMES-DISPATCH* (January 31, 1999). See also Logomasini, *supra* note 8, at Tables I and II.

[FN30]. Epstein, *supra* note 1, at 40.

[FN31]. *Id.* at 38. I should note that the primary national waste management law, the Resource Conservation and Recovery Act (RCRA), primarily applies to the management of wastes classified as "hazardous," and not the sorts of waste at the heart of the *Philadelphia v. New Jersey* dispute.

[FN32]. MICHAEL GERRARD, *WHOSE BACKYARD, WHOSE RISK?* 172 (1994).

[FN33]. *Id.* at 32.

[FN34]. *Id.* at 34.

[FN35]. See Lynn Scarlett, *Product Take-back Systems: Mandates Reconsidered*, *POLICY STUDY* 153 (Center for the Study of American Business, October 1999).

END OF DOCUMENT