

4-1-1994

Capacity Assurance Requirement: A Means for Resolving the Interstate Hazardous Waste Controversy

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Recommended Citation

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CAPACITY ASSURANCE REQUIREMENT: A MEANS FOR RESOLVING THE INTERSTATE HAZARDOUS WASTE CONTROVERSY

EILEEN KENNEDY*

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I. INTRODUCTION

Public opposition to the siting of new hazardous waste treatment and disposal facilities is escalating.¹ Since 1984 only one new solidification and landfill disposal facility has been issued a permit and put into operation.² In addition, capacity to manage and dispose of our nation's hazardous wastes at some commercial treatment and disposal facilities is dwindling.³ These concerns fuel one of the most contentious

1. See Dan Hopey, *Communities in State Resist Incinerators*, THE PITTSBURGH PRESS, Mar. 17, 1992 at A1 (reporting that Protect Environment and Children Everywhere (PEACE) gathered 22,000 petition signatures in opposition to a proposal to build a hazardous waste incinerator in Clarion County, Pennsylvania); Jim Massie, *Activist Says Incinerator Will Turn Ohio Into 'Pay Toilet'*, COLUMBUS DISPATCH, Nov. 22, 1991 at C5; Bob Downing, *Hard Ball Over Hazardous Wastes Toledo Area Dump Owner and Opponents Pull Out Stops*, AKRON BEACON J., Apr. 9, 1990, at C1; T. C. Brown, *Fingerhut Proposal Could Block Incinerator*, PLAIN DEALER, Jan. 30, 1992 at C3.

Arizona faced intense public opposition to a permitted incinerator to be operated by Environmental Services Corp. (ENSCO). Jim Bishop Jr., *Arizona's Environment: Now Is The Hour In Places Like The Verde Valley, The Public Is Getting Very Hot Under The Collar*, ARIZONA REPUBLIC, Aug. 27, 1989, at C7. In two years, Arizona paid \$44 million to ENSCO to breach its contract to allow the incinerator. Pat Flannery, *In 2 Weeks, ENSCO Is Out Of State Arizona Must Find Way To Meet Rules On Waste*, THE PHOENIX GAZETTE, Sept. 10, 1991, at A1.

Similarly within the past two years, North Carolina, Massachusetts and Mississippi killed plans for siting incineration facilities in their respective states. Paul Kemezis, *States Fight For Rights*, CHEMICAL WK., Aug. 21, 1991, at 56.

Texas Governor Richards sought to adopt a two-year moratorium on issuing permits to incineration and injection well projects. *Texas Governor Richards Halts Permit Process; To Seek Hazwaste Moratorium*, HAZARDOUS WASTE BUS., Feb. 27, 1991, at 3.

2. Kemezis, *supra* note 1.

3. Michigan and Illinois project less than ten years of capacity at existing sites. *Id.* In one recent study, thirteen states were found to have shortfalls in incinerator capacity through 1995 and in landfill and sludge treatment capacity through 2009. SHARON N. GREEN, *PLANNING FOR HAZARDOUS WASTE CAPACITY: LESSONS FROM THE NORTHEAST STATES* (1990). The Environmental Protection Agency found national shortages in incinerator capacity. *Interstate Transportation of Solid Waste, 1991: Hearings Before Subcom. on Transportation and Hazardous Materials of the House Committee on Energy and Commerce, 102nd Cong., 1st Sess. 80, 88-89* (1991) [hereinafter *Interstate Transportation Hearings*] (Statement of Don. R. Clay, Assistant Administrator for Office of Solid Waste and Emergency Response, Environmental Protection Agency). *But see* GENERAL ACCOUNTING OFFICE, *HAZARDOUS WASTE: FUTURE AVAILABILITY OF AND NEED FOR TREATMENT CAPACITY ARE UNCERTAIN* (1988) [hereinafter GAO, *TREATMENT CAPACITY*].

issues facing the United States today: Where should we treat and dispose of our nation's hazardous waste?

Of the 275 million tons⁴ of hazardous waste⁵ generated in the United States per year, only a small percentage is disposed of in off-site management facilities.⁶ The hazardous waste disposal market for this small percentage is national in scope. All fifty states export some hazardous waste to other states, and forty-eight states import some hazardous waste from other states.⁷ Moreover a plethora of hazardous substances exist which require specific technologies for treatment. The average state exports hazardous waste to nineteen other states and utilizes twelve different treatment and disposal technologies in those states.⁸ As new commercial landfills and incinerators are the two most difficult management/disposal facilities to site,⁹ the interstate hazardous waste disposal debate largely revolves around the siting of these facilities.

4. GAO, TREATMENT CAPACITY, *supra* note 3, at 2.

5. Congress defined "hazardous waste" as:
a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical or infectious characteristics may
(A) cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or
(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

42 U.S.C. § 6903(5)(A)&(B) (1988).

6. *Review of EPA's Capacity Assurance Program, 1991: Hearings Before Subcom. on Env't., Energy, and Natural Resources of the House Committee on Government Operations, 102nd Cong., 1st Sess. 96 (1991)* [hereinafter *CAPs Review Hearings*] (Statement of Sue R. Robertson, Chief, Land Div., Alabama Dept. of Environmental Management). In 1987, the EPA estimated less than two percent (3.8 million tons) of hazardous waste were transported across state borders. *Interstate Transportation Hearings, supra* note 3, at 78.

7. NATIONAL SOLID WASTES MANAGEMENT ASS'N, INTERCHANGE OF HAZARDOUS WASTE MANAGEMENT SERVICES AMONG STATES AND THE EPA'S CAPACITY ASSURANCE PROGRAM (1991).

8. *Id.* at 8, 12.

9. "According to survey results, landfills and incinerators are harder to site successfully than are treatment facilities." NEW YORK STATE LEGISLATIVE COMMISSION ON TOXIC SUBSTANCES AND HAZARDOUS WASTES, HAZARDOUS WASTE FACILITY SITING A NATIONAL SURVEY 40 (1987) [hereinafter LEGISLATIVE COMMISSION]; see also Kemezis, *supra* note 1.

Concerned with the states' inability to site newer, safer hazardous waste management and disposal facilities in the face of intense public opposition,¹⁰ Congress enacted the Capacity Assurance Plan (CAP) provision in the *Superfund Amendments and Reauthorization Act*.¹¹ The provision requires states to enter into a cooperative agreement with the Environmental Protection Agency whereby the state assures that it will have adequate capacity for the treatment and disposal of the hazardous wastes which are reasonably expected to be generated within the state over the next twenty years.¹²

The Environmental Protection Agency required the states to submit a written plan which described the amount of hazardous waste generated in the state; the total treatment and disposal capacity located in the state; and, if necessary, the state's plans to create additional capacity or to minimize waste generation. The provision had several problems. First neither the statutory provision nor the EPA's implementation of it specified the level of capacity desired: capacity at the national, regional or state level. Second the EPA did not enforce sanctions against noncomplying states. As a result, the CAP provision failed to compel the states to effectively deal with the siting crisis.¹³ Thus far, the provision has exacerbated tension and animosity among the states.¹⁴

10. S. REP. NO. 11, 99th Cong., 1st Sess. (1985).

11. Pub. L. No. 99-499, 100 Stat. 1613 (codified at 42 U.S.C. § 9604(c)(9) (1988)).

12. *Id.*

13. Since the provision's enactment in 1986, no new commercial hazardous waste landfills have been sited. Kemezis, *supra* note 1, at 56.

14. See *South Carolina ex rel. Medlock v. Reilly*, [1992] 23 *Envtl. L. Rep.* (Envtl. L. Inst.) 20, 101 (D.D.C. May 7, 1992) (South Carolina sought an order by the Court that the defendant shall not provide or reserve federal funds for remedial actions in the state of North Carolina); *New York v. Reilly*, 143 F.R.D. 487 (N.D.N.Y. 1992) (New York sought to compel defendant to perform his non-discretionary duties under 42 U.S.C. § 9604(c)(9) (1993)). See also *New York State Sues the EPA Over Interstate Hazwaste Disposal Regulation*, *HAZARDOUS WASTE BUS.*, Jan. 29, 1992, at 3; *New York Wants Superfund CAP Enforced, Demands Sanctions*, *PESTICIDE & TOXIC CHEMICAL NEWS*, Dec. 25, 1991, available in *WESTLAW*, Pts-News Database; Paul Kemezis, *New York Takes Strong Stance on Hazardous Waste Imports*, *CHEMICAL WK.*, Jan. 8, 1992, at 8 [hereinafter Kemezis, *Strong Stance*].

North Carolina was ousted from its regional group for failing to meet the milestone of siting an incinerator. Andrew Loesel, *Border Battles: States Are Hoping to Gain greater Control Of Waste Crossing Their Borders, and Congress May Be Willing To Let Them*, 240 *CHEMICAL MARKETING REP.*, Nov. 18, 1991 at SR7

Thirteen states have commercial hazardous waste landfills.¹⁵ These states reacted by attempting to protect the remaining commercial landfill and incinerator capacity located in their respective states, and to force equitable distribution of treatment capacity.¹⁶

New York State is one such state. In particular, Western New York houses one of the few commercial hazardous waste land disposal facilities in the United States.¹⁷ New York State attempted to comply with the CAP requirement by entering into an agreement with several of the Northeastern states. However, because officials believed that New York was accepting too much waste in return for too little capacity from out-of-state management facilities, New York declined to enter into an agreement with the Northeastern states.¹⁸ Also, Alabama, Indiana and South Carolina, among others, have attempted to ban hazardous waste from exporting states that do not have comparable treatment facilities.¹⁹ Alabama also enacted a differential tax structure charging \$40 per ton for in-state hazardous wastes and \$112 per ton for out-of-

[hereinafter *Border Battles*]; Michael Weisskopf, *Carolina's Clash Over Toxic Waste: Sign of a Nationwide Problem*, WASH. POST, Mar. 18, 1991, at A7.

Thirteen states have banded together to form the "States For Responsible and Equitable Waste Management." Their objective is to push for tougher federal action to penalize exporters, increasing waste disposal fees, and even banning waste from certain large scale exporters. Elizabeth Ross, *'Importer' States Rebel Against Hazardous Waste, Thirteen Band Together Demand Federal Action To Penalize 'Exporter' States*, CHRISTIAN SCI. MONITOR, Oct. 25, 1990, at 7.

15. *Border Battles*, *supra* note 14 (crediting the National Solid Wastes Management Association as the source of this number). A more recent estimate states that sixteen states house a national total of twenty-one hazardous waste commercial landfills. Respondent's Brief at 10, *Chemical Waste Management v. Hunt*, 112 S.Ct. 2009 (1992) (No. 91-471).

16. The states have attempted to restrict out of state hazardous waste to lessen the inequity felt by its citizens more than to preserve capacity. Alabama's Emelle facility has capacity that will last until the "next millennium" as ChemWaste owns 2,700 acres at Emelle and fills about 2-3 acres per year. Mary Powers, *Alabama Will Challenge CWM Attempt to Provide Capacity to Mississippi*, HAZARDOUS WASTE BUS., Dec. 30, 1992, at 1.

17. Department of Environmental Conservation, New York State, Capacity Assurance Plan (1989).

18. GREEN, *supra* note 3, at 89; Kemezis, *Strong Stance*, *supra* note 14.

19. *Border Battles*, *supra* note 14.

state wastes.²⁰ The Supreme Court²¹ struck down the bans and differential fees²² as unconstitutional for violating the Commerce Clause.

Courts and commentators agree that the Commerce Clause does not permit the states to interfere with the free flow of interstate hazardous waste commerce.²³ The Supreme Court also held that the CAP

20. *Id.*

21. *National Solid Waste Management v. Alabama Dept. of Environmental Management*, 910 F.2d 713 (11th Cir. 1991), *cert. denied*, 111 S. Ct. 2800 (1991); *Hazardous Waste Treatment Council v. South Carolina*, 945 F.2d 781 (4th Cir. 1991).

22. *Chemical Waste Management, Inc. v. Hunt*, 112 S.Ct. 2009 (1992). While outright bans and differential fees have been held unconstitutional, South Carolina and New York have brought suits to compel the Environmental Protection Agency to enforce sanctions against states which have failed to reach their milestones. The United States District Court of the District of Columbia dismissed South Carolina's case for failure to state a claim upon which relief may be granted. *South Carolina ex rel. Medlock v. Reilly* [1992], 23 *Envtl. L. Rep.* (Envtl. L. Inst.) 20, 101 (D.D.C. May 7, 1992); *see also U.S. Court Dismisses South Carolina's Suit Against EPA Over CAPs, HAZARDOUS WASTE BUS.*, June 3, 1992, at 1. The New York suit withstood motions for dismissal. However, the United States District Court for the Northern District of New York noted its concerns over whether, upon further discovery, New York will be able to present sufficient evidence to withstand a motion for summary judgment. *New York v. Reilly*, 143 F.R.D. 487 (N.D.N.Y. 1992); *see also State Had Standing To Sue To Compel EPA To Act*, NAT. L.J., November 16, 1992 at 36.

Some states have established hazardous waste management fees that do not discriminate on basis of origin. *E.g.*, TEX. HEALTH & SAFETY CODE ANN. § 361.136 (West 1992).

23. *See generally* Gerard M. McCabe, *Comment, The Validity of the State Symmetry Requirements Banning Hazardous Waste From Environmentally Indolent States*, 10 *TEMP. ENVTL. L. & TECH. J.* 169 (1991)(discussing the use of taxes for a disincentive to exporting states); Ray Vaughan, *Toxic Destiny: Changing Alabama's Future as a Hazardous Waste Dumping Ground*, 43 *ALA. L. REV.* 75 (1991)(advocating condemnation of Emelle facility, the United States' largest and Alabama's only landfill); Troy Fitzgerald, *The Constitutionality of Utah's Hazardous Waste Disposal Fee*, 6 *B.Y.U. J. PUB. L.* 279 (1992)(discussing constitutionality of differential fees); Carol Watson, *Waste Not, Want Not or How Alabama Went To Bat With an Additional Fee on Imported Hazardous Waste and Didn't Strike Out Under the Commerce Clause*, *Hunt v. Chemical Waste Management, Inc.*, 584 So.2d 1367 (Ala. 1991), 27 *LAND & WATER L. REV.* 645 (1992); B. J. Wynne III & Terri Hamby, *Interstate Waste: A Key Issue in Resolving the National Capacity Crisis*, 32 *S. TEX. L.J.* 601 (1991); Russell A. Berland, *State and Local Attempts To Restrict the Importation of Solid and Hazardous Waste: Overcoming the Dormant Commerce Clause*, 40 *U. KAN. L. REV.* 465 (1992); Kenneth G. Cole, *Hunt v. CWM- Alabama Attempts To Spread the Nation's Hazardous Waste Disposal Burden by Imposing a*

provision is not an express authorization from Congress that the states may impede the hazardous waste market.²⁴ Caps on the level of hazardous waste that a state will allow the landfill to accept; fees, evenhandedly applied to in-state and out-of-state hazardous waste; and per mile tax on transported hazardous waste throughout the state are the few constitutionally permissible measures that the states may use.²⁵ However, these measures do little to enforce equitable distribution of hazardous waste treatment and disposal facilities. While the CAP provision could be an efficient tool to address equity concerns, the EPA's most recent directive suggests that inequity in the disposal of hazardous waste will continue. Furthermore, this implementation of the CAP provision will magnify the already existing inequities and force Western New York to become the nation's hazardous waste dump.

This article summarizes the issues surrounding the interstate hazardous waste controversy and discusses the CAP provision as a mechanism to resolve these issues. Part I of this article summarizes the arguments for continuing an uninhibited hazardous waste market as well as the arguments for the equitable distribution of treatment capacity. Part II of this article describes the CAP requirement, the Congressional intent, and the EPA's implementation of it. This part also discusses the problems with the requirement and the EPA's subsequent reversal of the requirement. Finally, Part III discusses the legal restraints which prevent states from forcing equitable distribution of hazardous waste facilities. Part III also argues that the EPA's reversal to the requirement does not adequately address this concern and as a result, Western New York will be forced to accept hazardous waste from across the nation.

II. INTERSTATE HAZARDOUS WASTE CONTROVERSY

The interstate hazardous waste debate reflects the tension between the equitable distribution of capacity and the creation of sufficient treatment capacity. The Environmental Protection Agency perceives a

Jenkins, *Constitutionally Mandated Southern Hospitality: National Solid Wastes Management Association and Chemical Waste Management, Inc. v. Alabama Department of Environmental Management*, 69 N.C. L. REV. 1003 (1991); Christine M. Fixl, *Hazardous Waste and Partial Import Bans: An Environmentally Sound Exception To The Commerce Clause*, 3 VILL. ENVTL. L.J. 149 (1992).

24. *Chemical Waste Management, Inc. v. Hunt*, 112 S. Ct. 2009 (1992).

25. *Id.*; Cole, *supra* note 23, at 1233-42; Watson, *supra* note 23.

treatment capacity. The Environmental Protection Agency perceives a number of goals in addressing the problem. These include ensuring: the equitable distribution of treatment capacity; the creation of capacity that is protective of human health and the environment; access to that capacity for all generators; and waste management that is cost effective.²⁶ The following section describes the hazardous waste market and the reasons for continuing an uninhibited market as well as the issues involving the equitable distribution of treatment capacity. Finally, the section concludes with a summary of the solutions to public opposition and reasons for their failure.

A. *Hazardous Waste Market*

The 275 million tons of hazardous waste generated in the United States every year originate from a variety of industries.²⁷ Particular types of wastes are generated in volumes ranging from a few tons annually to several million tons annually.²⁸ There are nineteen treatment technologies available that meet the health and safety requirements unique to the wastes.²⁹ Nationwide, there are approximately 4,700 facilities operating under federal permits authorizing the treatment, storage and disposal of some form of hazardous waste; these facilities contain approximately 81,000 distinct waste management units.³⁰ While numerous treatment facilities exist, most states do not house facilities to treat and dispose of every type of

26. *Interstate Transportation Hearings*, *supra* note 3, at 83 (statement of Don R. Clay, Assistant Administrator For Solid Waste and Emergency Response, Environmental Protection Agency).

27. Every state has agriculture and industry which generate a variety of hazardous wastes. See NAT'L SOLID WASTES MGMT. ASS'N. INTERCHANGE OF HAZARDOUS WASTE MANAGEMENT SERVICES AMONG STATES (1990).

28. See, e.g., Brief for the United States as Amicus Curiae supporting Petitioner, *Chemical Waste Management, Inc. v. Hunt*, 112 S. Ct. 2009 (1992) (No. 91-471).

29. See STANDARD HANDBOOK OF HAZARDOUS WASTE TREATMENT AND DISPOSAL (Harry M. Freeman ed., 1989); NAT'L. SOLID WASTES MGMT. ASS'N., *supra* note 27.

30. ENVIRONMENTAL PROTECTION AGENCY, THE NATION'S HAZARDOUS WASTE MANAGEMENT PROGRAM AT A CROSSROADS: THE RCRA IMPLEMENTATION STUDY 7 (1990).

waste that its residents and industry generate.³¹

Commentators argue that the national market for hazardous waste is necessarily integrated and interdependent.³² The following reasons support this contention. Building treatment and disposal facilities capable of handling every type of waste generated in the state is not economically efficient or feasible.³³ The Department of Justice notes, "[i]n many cases, treatment or disposal facilities are so capital intensive that their economic viability depends upon the fact that there are only a few of them in the country."³⁴ In further support of this argument, the Department of Justice notes that the land disposal pretreatment regulations intensify the specialization of the hazardous waste market.³⁵ The regulations - encouraging incineration and recycling of hazardous waste - require more technically complex and costly treatment.³⁶ Small generators cannot afford to treat their wastes on

31. *National Solid Wastes Management Ass'n v. Alabama Dep't of Env'tl. Management*, 910 F.2d 713, 717 (11th Cir. 1990), *cert. denied*, 111 S.Ct. 2800 (1990); ENVIRONMENTAL PROTECTION AGENCY, GENERATION AND CAPACITY A PROFILE OF HAZARDOUS WASTE MANAGEMENT IN EPA REGION IV (1989); *see also* ENVIRONMENTAL PROTECTION AGENCY, SUMMARY REPORT OF CAPACITY AT COMMERCIAL FACILITIES (1989)[hereinafter SUMMARY REPORT].

32. Brief for Amici Curiae Hazardous Waste Treatment Council and the National Solid Wastes Management Ass'n at 5, *Chemical Waste Management, Inc. v. Hunt*, 112 S.Ct. 2009 (1992) (No. 91-471); *see* United States Amicus Curiae Brief at 10-11, *Chemical Waste Management* (No. 91-471).

33. The Hawkins Point landfill, located in Maryland, exemplifies this. It closed in part because it could not compete financially with commercial facilities in other states. Richard N. L. Andrews, *Hazardous Waste Facility Siting: State Approaches*, in DIMENSIONS OF HAZARDOUS WASTE POLITICS AND POLICY 117, 122 (Charles E. Davis & James P. Lester, eds., 1988). Iowa recently considered establishing a long-term storage facility in the State to serve in-state needs. Based on the small amount of waste the facility would handle, the per ton storage cost would have been several times greater than the cost of existing out-of-state disposal. United States Amicus Curiae Brief at 10, *Chemical Waste Management* (No. 91-471) (citing ALEX BROWN & SONS, ENVIRONMENT SERVICES GROUP, HAZARDOUS WASTE: LAND DISPOSAL UPDATE 7 (1989)).

34. United States Amicus Curiae Brief at 10, *Chemical Waste Management* (No. 91-471).

35. *Id.*

36. *Id.*

site, nor do they possess the technical expertise to do so.³⁷ Finally, the existence of a national market for hazardous waste contributes to the development of innovative technologies and advanced facilities.³⁸

The prevalence of interstate dependence in the hazardous waste market is, perhaps, best evidenced by the capacity assurance plans. The states' submissions showed the following patterns of interstate transport of hazardous waste: thirty-seven states and the District of Columbia are net exporters, thirteen states are net importers, and only ten states and the District of Columbia did not have any imports.³⁹ Although the interstate hazardous waste market is complex and national in scope, the equitable distribution of treatment capacity must be addressed. The following sections highlight the concerns of communities threatened with hosting a hazardous waste treatment facility.

B. *Public Opposition and Equity Concerns*

Public opposition to the siting of hazardous waste facilities as well as other locally unwanted land uses (LULUs), such as state prisons and institutions, is commonly referred to as the "not in my backyard" (NIMBY) syndrome. While the NIMBY syndrome concerned academics and state officials in the 1970's and early 1980s,⁴⁰ it has only recently received the attention of Congress.⁴¹ Commentators have since

37. *Id.*

38. Brief of Amici Curiae Hazardous Waste Treatment Council and National Solid Wastes Management Association at 5, *Chemical Waste Management* (No. 91-471).

39. *CAPs Review Hearings*, *supra* note 6, at 187 (statement of Sylvia K. Lowrence, Director, Office of Solid Waste and Emergency Response, Environmental Protection Agency); *see also* ENVIRONMENTAL PROTECTION AGENCY, *THE TOXICS RELEASE INVENTORY: A NATIONAL PERSPECTIVE*, 1987 (1989); ENVIRONMENTAL PROTECTION AGENCY, *1985 NATIONAL BIENNIAL REPORT OF HAZARDOUS WASTE GENERATORS AND TREATMENT, STORAGE AND DISPOSAL FACILITIES REGULATED UNDER RCRA* (1989).

40. Michael O'Hare, *Not On My Block You Don't: Facility Siting and The Strategic Importance Of Compensation*, 25 *PUBLIC POLICY* 407 (1977); Frank J. Popper, *Siting LULUs*, 47 *PLANNING* 12 (1981); U.S. ENVIRONMENTAL PROTECTION AGENCY, *SITING OF HAZARDOUS WASTE MANAGEMENT FACILITIES AND PUBLIC OPPOSITION* (1979); *see* U.S. ENVIRONMENTAL PROTECTION AGENCY, *STATE DECISION-MAKERS GUIDE TO HAZARDOUS WASTE MANAGEMENT* (1977).

41. Congress responded to the growing NIMBY syndrome by enacting the following:

The President shall not provide any remedial actions pursuant to this section unless the state in which the release occurs first enters into an agreement with

contributed much literature analyzing the NIMBY syndrome. From this body of literature, this section summarizes the salient issues concerning the NIMBY syndrome.

Fear characterizes the NIMBY syndrome.⁴² "Opposition is rooted in the fears of major and long-term risks posed by facilities to the health and welfare of the surrounding community."⁴³ However, the risk perceived is not always the equivalent of the actual risk.⁴⁴ Memories of Love Canal, New York and Times Beach, Missouri color the public's perception of modern hazardous waste management facilities.⁴⁵ The public may confuse the dumps of our recent past with the newer, safer disposal facilities equipped with liners, leachate collection systems and

the President providing assurances deemed adequate by the President that...(B) the state will assure the availability of a hazardous waste disposal facility acceptable to the President and in compliance with the requirements of subtitle C of the Solid Waste Disposal Act for any necessary offsite storage, destruction, treatment, or secure disposition of the hazardous substances.

Comprehensive, Environmental Response, Compensation and Liability Act, Pub. L. No. 96-510, § 104(c)(3), 94 Stat. 2767, 2775-76 (current version at 42 U.S.C. § 9604(c)(9)).

Unfortunately, this provision was largely ignored until the enactment of the Superfund Amendments and Reauthorization Act of 1986.

42. KENT E. PORTNEY, *SITING HAZARDOUS WASTE TREATMENT FACILITIES: THE NIMBY SYNDROME* 1-5 (1991); DAVID MORELL & CHRISTOPHER MAGORIAN, *SITING HAZARDOUS WASTE FACILITIES: LOCAL OPPOSITION AND THE MYTH OF PREEMPTION* 22-23 (1982); AUDREY M. ARMOUR, *SITING OF LOCALLY UNWANTED LAND USES: TOWARDS A COOPERATIVE APPROACH* 27 (1990).

43. MORELL & MAGORIAN, *supra* note 42, at 22 (quoting U.S. ENVIRONMENTAL PROTECTION AGENCY, *SITING HAZARDOUS WASTE MANAGEMENT FACILITIES AND PUBLIC OPPOSITION* iii (1979)).

Little experience-based data exists [sic], however, on the long-term performance of [clay liners and covers] technology requirements in preventing waste migration. Although at least one company producing liner and cover material estimates that the material will last hundreds of years, EPA and others believe that permanent containment of wastes is not possible and that leaking will occur at some time after the 30-year post-closure period.

U.S. GENERAL ACCOUNTING OFFICE, *HAZARDOUS WASTE FUNDING OF POSTCLOSURE LIABILITIES REMAINS UNCERTAIN* 3 (1990) [hereinafter GAO, *POSTCLOSURE LIABILITIES*].

The extent of the risk to human health and the environment is unknown. *Id.*

44. MORELL & MAGORIAN, *supra* note 42, at 23; PORTNEY, *supra* note 42, at 38-41.

45. *See generally*, MICHAEL R. EDELSTEIN, *CONTAMINATED COMMUNITIES, THE SOCIAL AND PSYCHOLOGICAL IMPACTS OF PERSISTENT TOXIC EXPOSURE* 170 (1988).

groundwater monitoring systems.⁴⁶

The opposition to the siting of hazardous waste management facilities, in part, is due to the nuisance it creates. For example, a waste facility requires heavy truck traffic, is potentially accompanied by odor, noise and unsightliness.⁴⁷ Also, the siting of a waste facility usually will lower property values.⁴⁸

Another potent force behind the NIMBY syndrome is the "perception of injustice, of exploitation, of unfairness."⁴⁹ The public is more adverse to hosting wastes from all over a region than from the community itself.⁵⁰ The implementation of the capacity assurance requirement and the recent Supreme Court holdings that bans on imported waste⁵¹ and differential fees⁵² are unconstitutional magnify the perception of inequity. Host communities continue to be threatened with the possibility of becoming the nation's dump.⁵³ Related to the perception of inequity is the actual inequitable distribution of benefits and costs accompanied with the siting of hazardous waste facilities. The

46. MORELL & MAGORIAN, *supra* note 42, at 22-23; PORTNEY, *supra* note 42, at 41.

47. MORELL & MAGORIAN, *supra* note 42, at 23.

48. CAPs Review Hearings, *supra* note 6, at 3 (Statement of Representative Clinger):

("Moving away from the potential health risks, let me translate the practical economic effect of a facility of this nature. Real estate values in the area have already plummeted, and tourism and outdoor recreation will suffer. As the local economic infrastructure crumbles with the erosion of the tax base, hundreds of jobs could be lost.")

49. David Morell, *Siting and The Politics of Equity*, in RESOLVING LOCATIONAL CONFLICT 117, 120 (Robert W. Lake ed., 1987); PORTNEY, *supra* note 42 at 120-23.

50. Morell, *supra* note 49, at 120; MARY J. HOUGHTON, NATIONAL GOVERNORS' ASSOCIATION, VOLUME IV: SITING NEW TREATMENT AND DISPOSAL FACILITIES 21 (1989); VIRGINIA BECKER, NATIONAL GOVERNORS' ASS'N, LEGAL ISSUES AFFECTING INTERSTATE DISPOSAL 3 (1989); see LEGISLATIVE COMMISSION, *supra* note 9, at 40 (finding on-site facilities easier to site than off-site facilities).

51. *National Solid Waste Management v. Alabama Dep't. of Env'tl. Management*, 729 F.Supp. 792 (N.D. Ala. 1990), *cert. denied*, 111 S.Ct. 2800 (1991); *Hazardous Waste Treatment Council v. South Carolina*, 945 F.2d 781 (4th Cir. 1991).

52. *Hunt v. Chemical Waste Management, Inc.*, 112 S.Ct. 2009 (1992).

53. See *South Could Be Dumping Ground For U.S., Landfill Opponent Warns*, ATLANTA CONSTITUTION, September 10, 1990 at D04.

host community bears the burden of future unknown risks to public health and the environment, the nuisances accompanying the facility, and the stigma of becoming the region's dumping ground.⁵⁴

Growing concern among academics and government officials for the NIMBY syndrome spawned much literature on solutions to the problem. The commentators rely heavily on the aforementioned assumptions. The next section describes the proposed remedies and argues that for the most part they are ineffective.

C. *Solutions for Overcoming Public Opposition*

Theorists recommend several solutions to alleviate public opposition. They are compensation, risk communication, and negotiation and mediation. The states have enacted siting statutes which allow public participation to varying degrees and incorporate in part these theories.⁵⁵

Compensation for the costs incurred in hosting a hazardous waste facility addresses the assumption that opposition stems from the inequitable distribution of costs associated with siting facilities. Theorists suggest that economic incentives could be offered to local residents so that the perceived benefits would eventually outweigh the perceived costs.⁵⁶ Massachusetts enacted the 1980 Hazardous Waste Facility Siting Act⁵⁷ which incorporates the compensation theory. The act prescribes that communities receive negotiated benefits in exchange for permission to site a facility.⁵⁸

54. Respondents' Brief, *Chemical Waste Management, Inc. v. Hunt*, 112 S.Ct. 2009 (1992) (No. 91-471); Morell, *supra* note 49, at 120-21; MORELL & MAGORIAN, *supra* note 42, at 68-72; HOUGHTON, *supra* note 50, at 4.

55. *E.g.*, MISS. CODE ANN. § 17-18-15 (1991); N.C. GEN. STAT. § 130B-11 (1992); W. VA. CODE § 20-10A-1 (1992).

56. PORTNEY, *supra* note 42, at 25.

57. Massachusetts Hazardous Waste Facility Siting Act, MASS. GEN. LAWS ANN. ch. 21D (1992).

58. Lawrence S. Bacow & James R. Milkey, *Overcoming Local Opposition to Hazardous Waste Facilities The Massachusetts Approach*, in *RESOLVING LOCATIONAL CONFLICT* 159, 166-70 (Robert W. Lake ed., 1987); PORTNEY, *supra* note 42, at 27.

The compensation theory has had little success in practice.⁵⁹ One study conducted by Kent E. Portney indicates that generally the public attitude against siting a facility does not change when offered economic benefits.⁶⁰ One reason could be that when opposition to local siting is strongly influenced by a perception of the dangers or risks associated, whether correctly or incorrectly, with hazardous waste treatment facilities,⁶¹ no amount of compensation can allay fears.

A second remedy promoted in literature is the communication of risk to the public. Comparing the risks of the newer, safer waste management facilities with risks generally accepted, i.e. the siting of industrial complexes, may lessen the public opposition. Again, commentators have concluded that public education does little to alter the public's perception of risk.⁶² "Indeed, given the fact that siting decisions will probably always engender media interest, there is plenty of reason to believe that changing risk communication processes can never fulfill this desired function."⁶³

Finally, some commentators encourage the use of negotiation and

59. While Massachusetts has proceeded further than many other states in the siting process, the state has not been successful in siting a facility. GREEN, *supra* note 3.

60. PORTNEY, *supra* note 42 at 36-38. ("There is abundant evidence that [economic benefits] does not and will not work in practice.") (citing Kent E. Portney, *CITIZEN ATTITUDES TOWARD HAZARDOUS FACILITY SITING: PUBLIC OPINION IN FIVE MASSACHUSETTS COMMUNITIES* (1983); Kent E. Portney, *Allaying the NIMBY Syndrome: The Potential For Compensation in Hazardous Waste Treatment Facility*, 1 *HAZARDOUS WASTE* 411 (1984); Kent E. Portney, *The Potential Theory of Compensation For Mitigating Public Opposition To Hazardous Waste Treatment Facility Siting: Evidence From Five Massachusetts Communities*, 14 *POLICY STUDIES J.* 81 (1985); Kent E. Portney, *The Perception of Health Risk and Opposition To Hazardous Waste Treatment Facility Siting: Implications For Hazardous Waste Management and Policy From Survey Research*, in *PAPERS AND PROCEEDINGS OF THE APPLIED GEOGRAPHY CONFERENCES* 114 (1986). *Contra* MORELL & MAGORIAN, *supra* note 42, at 166-75.

61. PORTNEY, *supra* note 42, at 95.

62. PORTNEY, *supra* note 42, at 38-41.

63. PORTNEY, *supra* note 42, at 39 (citing Allan Mazur, *Communicating Risk In The Mass Media*, in *PSYCHOLOGICAL EFFECTS OF HAZARDOUS TOXIC WASTE DISPOSAL ON COMMUNITIES* (D. Peck ed., 1989)).

mediation.⁶⁴ Some states have adopted this approach while others have not. The state siting statutes can be described as follows: Several state governments identify the appropriate site and in some cases obtain and own the site.⁶⁵ A second approach is to create a state agency or board that has power to override local decisions to oppose the siting of a facility. Some of the state boards have members that represent the community while other state boards have ad hoc members that represent the affected community. In this case, the state government does not take over initiative for siting proposals but does intervene to override local government powers.⁶⁶ The third approach is to vest full authority to make siting decisions with the local government affected.⁶⁷

According to one recent study, neither strong public participation nor strong state initiative programs are essential to siting success.⁶⁸ Some elements of public participation in the siting process appear to promote siting approval and the issuance of permits.⁶⁹ However with the exception of Colorado, no state has successfully sited a commercial landfill in almost a decade. The aforementioned theories and siting statutes have not been successful in practice where they are most needed - incineration and landfilling. In this context, Congress enacted the CAP provision.

64. MORELL & MAGORIAN, *supra* note 42, at 176-77; Bacow & Milkey, *supra* note 58, at 181-83; John J. Pitney, *Bile Barrel Politics*: 64.1271 *Siting Unwanted Facilities*, 3 J. POLICY ANALYSIS AND MANAGEMENT 446 (1984). See also Michael E. Kraft & Ruth Kraut, *Citizen Participation and Hazardous Waste Policy Implementation*, in DIMENSIONS OF HAZARDOUS WASTE POLITICS AND POLICY 63, 77-78 (Charles E. Davis & James P. Lester, eds., 1988) (suggesting comparative case studies might illuminate the factors facilitating effective citizen participation).

65. Andrews, *supra* note 33, at 119; A. Dan Tarlock, *State Versus Local Control of Hazardous Waste Facility Siting: Who Decides in Whose Backyard?*, in RESOLVING LOCATIONAL CONFLICT 137, 142-43 (Robert W. Lake ed., 1987).

66. Andrews, *supra* note 33, at 119; Tarlock, *supra* note 65, at 143-46.

67. Andrews, *supra* note 33, at 119; Tarlock, *supra* note 65, at 151-53.

68. LEGISLATIVE COMMISSION, *supra* note 9, at 39.

69. *Id.*

III. CAPACITY ASSURANCE REQUIREMENT

Congress responded to the growing hazardous waste management crisis with the Capacity Assurance Plan § 104(c)(9) of the Superfund Amendments and Reauthorization Act of 1986.⁷⁰ The provision requires each state to submit a capacity assurance plan to the President. The plan must contain an assurance that the state has sufficient capacity at hazardous waste facilities to treat and/or dispose of all hazardous waste reasonably expected to be generated within the next twenty years. The states must assure capacity is available at facilities within the state or outside the state according to an interstate agreement, regional agreement or authority. Finally, the President must find the facilities acceptable and in compliance with subtitle C of the Solid Waste Disposal Act.

The statute gives the President broad discretion to determine the adequacy of the plan. There is no qualifying language in the legislative history or in the statute to define "adequate." For this reason, the Environmental Protection Agency's implementation of the provision, to some extent, is ill-informed. As a result, the implementation of CAPs has been strained since its inception and has engendered debate in Congress, in the courts and among the states. The following section focuses on the scant legislative comments in order to ascertain the purpose that the provision was meant to fulfill.

70. The statute indicates:

Siting. Effective three years after the enactment of the SARA [October 17, 1989] the President shall not provide remedial action unless the State in which the release occurs first enters into a contract or cooperative agreement with the President providing assurances deemed adequate by the President that the State will assure the availability of hazardous waste treatment or disposal facilities which-

- (A.) have adequate capacity for the destruction, treatment or secure disposition of all hazardous wastes that are reasonably expected to be generated within the State during the 20-year period following the date of such contract or cooperative agreement and to be disposed of, treated, or destroyed,
- (B.) are within the State or outside the State in accordance with an interstate agreement or regional agreement or authority,
- (C.) are acceptable to the President, and
- (D.) are in compliance with the requirements of subtitle C of the Solid Waste Disposal Act.

Superfund Amendments and Reauthorization Act Pub. L. 99-499, 100 Stat. 1613 (1986)(codified at 42 U.S.C. § 9604(c)(9)(1988)).

A. Congressional Intent

While little legislative discussion on the enactment of the CAP provision exists, Senator Chafee's comments revealed some objectives that the Committee intended the provision to serve. First the safe management of hazardous wastes necessitated the siting of new facilities which would employ the most modern technologies in waste treatment.⁷¹ That the lack of safe hazardous waste management lead to illegal disposal of the waste and the creation of future Superfund sites was an underlying concern of the Committee.⁷² Second, due to extreme political pressure, states were not siting needed new facilities.⁷³ This statement captures the major impetus for the enactment of the provision: "[T]he broader social need for safe hazardous waste management facilities often has not been strongly represented in the siting process. A common result has been that facilities have not been sited, and there has been no significant increase in hazardous waste capacity over the past several years."⁷⁴ Finally, the Committee

71. Federal hazardous waste policy legislation has several goals, two of which are (1) to bring existing treatment, storage and disposal (TSD) facilities up to minimum safety levels and then impose progressively higher levels of technology-based standards on new or expanded TSD facilities. Resource Conservation and Recovery Act, 42 U.S.C. § 6901 (1988); Tarlock, *supra* note 65, at 138. To meet these goals and to provide the safest waste treatment, new facilities must be sited, permitted and put into operation. S. REP. NO. 11, 99th Cong., 1st Sess. 22 (1985).

72. S. REP. NO. 11, 99th Cong., 1st Sess. 22 (1985) ("Recognizing that, as a general rule, States are not moving aggressively to avoid the creation of future Superfund sites, an amendment was adopted by the Committee.") Commentators have shared this view:

Finally, hazardous waste policy makers, legislators, and the public at large must come to accept the blunt reality that hazardous wastes will be managed. If not placed in well-designed new treatment facilities and residuals repositories, then they will go to traditional landfills and surface impoundments. Or worse yet they will be "managed" via illegal dumping in sewers, abandoned lots, along roadsides, in people's "front yards."

Morell, *supra* note 49, at 134; U.S. GENERAL ACCOUNTING OFFICE, *ILLEGAL DISPOSAL OF HAZARDOUS WASTE: DIFFICULT TO DETECT OR DETER* (1985) [hereinafter GAO, *ILLEGAL DISPOSAL*].

73. The Committee assumes that states are able to site new facilities but choose not to due to public opposition. The Committee seeks to remedy this with the denial of Superfund remedial action funds to those States with inadequate plans. "[F]inally, the most distressing problem, leadership by government officials is sorely lacking." S. REP. NO. 11, 99th Cong., 1st Sess. 23 (1985).

74. *Id.* at 22.

intended to address the NIMBY syndrome recognizing its history and continued prevalence across the nation.⁷⁵

The Committee did not explicitly purport to resolve issues of equity in the siting of hazardous waste facilities.⁷⁶ Instead the Committee emphasized the need for new and expanded treatment facilities and indicated the lack of representation it received in siting decisions. The Committee failed to effectively address what characterized the NIMBY syndrome according to commentators - the issues of equity⁷⁷ and the public's perception of health risk.⁷⁸ The lack of insight in this area may have contributed to the explosive interstate waste disposal controversy of today.

The Committee intended to provide for additional capacity. However, the Committee failed to explicitly indicate capacity at which level-state, regional or national?⁷⁹ The Committee stated, "[a] site in every state is not required. In some cases, multi-state efforts may be appropriate. Use of binding agreements through interstate compacts guaranteeing access to a facility is only one example of how a State may provide the requisite assurances. State or local ownership and operation of facilities or contracts with private facilities may also suffice."⁸⁰ The Committee apparently found that capacity at the state level is not required, but the Committee did not specify whether capacity is sought

75. "Congress failed to anticipate the intensity of the public opposition to new and expanded waste management.... Yet if the RCRA and Superfund programs are to work- if public health and the environment are to be protected - the necessary sites must be made available." *Id.* at 23.

76. Senator Chafee lists these obstacles to siting new hazardous waste management facilities:

- (1) lack of cooperation among interested parties who distrust one another's motives and doubt the willingness of the other parties to make any substantial concessions to alleviate their concerns
- (2) lack of reliable, objective criteria or information for evaluating proposals and sites and citizens' distrust of technical information provided by government or industry.
- (3) insufficient public perception of need for new treatment facilities

Id.

77. MORELL & MAGORIAN, *supra* note 42, at 22-23; Morell, *supra* note 49, at 119-20; PORTNEY, *supra* note 42, at 41.

78. PORTNEY, *supra* note 42, at 41.

79. *See infra* notes 113-19, 124-47 and accompanying text.

80. S. REP. NO. 11, 99th Cong., 1st Sess. 22 (1985).

at the regional level or the national level. The Committee portended that the use of the interstate agreements was a viable means of satisfying the provision's requirements. Finally, the interstate or regional agreement was required when a state relies on capacity at facilities located outside the state to fulfill the CAP requirements.⁸¹

In conclusion, the aforementioned statements provide some basis for an understanding of the CAP provision's purpose as well as some indication of the type of capacity desired and of the nature of the interstate agreement. It should be noted that Congress afforded the President wide discretion to implement the provision. The following section describes the Environmental Protection Agency's first implementation.

B. 1988 Directive

The Committee intended that the states enter into a cooperative agreement with the Environmental Protection Agency (EPA) to satisfy the requirements of the CAP.⁸² The Agency normally provides funding for state remedial actions through state Superfund contracts and cooperative agreements.⁸³ According to the CAP provision, the Administrator will only enter into contracts or cooperative agreements with those states that provide assurances regarding the availability of hazardous waste management facilities for twenty years from the date of the signature.⁸⁴ The Administrator interpreted the legislative history and the statutory language of the CAP to require states to demonstrate an understanding of the nature of the waste generated within their borders and to assure the availability of facilities to manage those wastes.⁸⁵ Also, the Administrator interpreted the statute to require the

81. Section 104 k(B) of SARA requires states assure the President that available capacity exists in-state facilities or "[facilities] out of state in accordance with an interstate agreement or regional agreement or authority." 42 U.S.C. § 9604(c)(9)(B) (1988). See also BECKER, *supra* note 50, at 26.

82. S. REP. NO. 11, 99th Cong., 1st Sess. 24 (1985).

83. Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9611 (1988).

84. Superfund Amendments and Reauthorization Act Pub. L. No. 99-499, 100 Stat. 1613 (1986)(codified at 42 U.S.C. § 9604(c)(9)(1988)).

85. OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, ENVIRONMENTAL PROTECTION AGENCY, ASSURANCE OF HAZARDOUS WASTE CAPACITY: GUIDANCE TO STATE OFFICIALS, OSWER Directive 9010.00 (1988)[hereinafter 1989 GUIDANCE].

states to assure availability of facilities in their state or out of state in accordance with an interstate or regional compact.⁸⁶ The Administrator required the assurances to be based upon the state's commitment to taking actions necessary to ensure the availability of adequate management capacity pursuant to its planning documents and in accordance with its interstate agreements.⁸⁷

The EPA instructed the states on what to provide in their CAPs in the *1988 Assurance of Hazardous Waste Capacity: Guidance to State Officials*. In this directive, the administrator instructed the states that the CAP should contain four subparts. First, the Administrator required a detailed description of past (base year) waste generation and treatment, destruction, and/or disposal capacity available at facilities within and/or outside the state.⁸⁸ Second, the Administrator required documentation of any waste minimization efforts that exist or will be undertaken by the state and/or industry within the state, and detailed information regarding how any waste minimization efforts will be taken into account in the projection of waste generation.⁸⁹ Third, the Administrator required a projection of generation and available capacity at facilities within and/or outside the state to treat, destroy, or securely dispose of waste, including an assessment of capacity shortfalls.⁹⁰ Finally, the Administrator required a description of milestones, such as permitting facilities if access to additional facilities was necessary, and descriptions of regulatory, economic, or other barriers that might inhibit their establishment and operation.⁹¹

The EPA has wide discretion to determine what the plans should contain. Based on the Administrator's interpretation of the statute, in order for the state to understand waste generation, the state should understand the effects of waste minimization in reducing the need for

86. *Id.*

87. *Id.*

88. *Id.*

89. *Id.*

90. *Id.*

91. *Id.*

access to treatment, destruction, and disposal facilities.⁹² Therefore, the Administrator required the states to determine the amount of all hazardous wastes generated within the state, including wastes that are difficult to project or wastes generated on a non-recurrent basis, after taking into account the effects of future regulatory actions and waste minimization efforts.

To assist in the preparation of the CAP and to foster interstate communication and cooperation, the Administrator provided administrative assistance to the states through their regional offices. In addition, the Administrator provided technical assistance to the states recognizing that they will have varying degrees of expertise in data manipulation. First the EPA provided the states with the *Technical Reference Manual (TRM)*⁹³ which described methods for manipulating the existing data on the type of waste generated. Also, the EPA provided the states with individualized reports on that state's hazardous waste management capacity based on the EPA's recent survey, *Treatment, Storage, Disposal and Recycling Survey (TSDR)*. Finally, the Agency intended to provide the states with computer software that would facilitate performing calculations described in the TRM.⁹⁴

The EPA regional offices evaluated the plans against the following criteria. First, the plans should form the basis for reasonable assurance that states have sufficient capacity for waste disposal over the next twenty years. Second, each state should demonstrate its commitment to carry out the plan. Finally, the plans should document the agreements for projected imports and exports of waste to and from other

92. *Id.*

While Congress did not require waste minimization efforts to lessen the demand for capacity in the CAP provision, the Administrator gleaned his authority to do so from the 1984 Hazardous Waste and Solid Waste Amendments to RCRA:

The Congress hereby declares it to be the national policy of the United States that, wherever feasible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible. Waste that is nevertheless generated should be treated, stored or disposed of so as to minimize the present and future threat to human health and the environment.

42 U.S.C. § 6902(b)(1988).

93. ENVIRONMENTAL PROTECTION AGENCY, *TECHNICAL REFERENCE MANUAL FOR REPORTING THE CURRENT STATUS OF GENERAL MANAGEMENT CAPACITY, IMPORTS AND EXPORTS* (1989).

94. The software was found to be slow, prone to freeze, contained logic errors, and used a system of rounding data that could create inaccuracies. *CAPs Review Hearings, supra* note 6, at 260. See GREEN, *supra* note 3, at 53-54 (finding that in the Northeast states the extent and type of use varied).

states.⁹⁵ The national headquarters evaluated the plans concurrently with the regional offices to provide some consistency. In particular, the EPA directed the regional officers to evaluate the accuracy, completeness and reasonableness of the plan and to determine whether the states made a good faith effort to produce high quality data and to reconcile any inconsistencies in its data and to assess whether the plans to provide new capacity were realistic and feasible.⁹⁶ The EPA could approve a plan conditionally provided additional goals, such as plans to site facilities, to reduce waste, or to enter into an interstate agreement, were met.⁹⁷

C. Analysis

Since its inception, the implementation of the CAP provision has been inhibited by conceptual and procedural problems.⁹⁸ Confusion over the goals of the statute hamper successful implementation. The measuring of hazardous waste and of the available treatment capacity, in itself, is an unwieldy task. Recent commentators have found inadequacies with the data measurement, collection and quality control.

1. *Generation and Management Data.* Studies report that the procedures for determining capacity assurance were seriously flawed.⁹⁹ Commentators reported that the procedures lacked information on the

95. OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, ENVIRONMENTAL PROTECTION AGENCY, AGENCY REVIEW OF SARA CAPACITY ASSURANCE PLANS, OSWER Directive 9010.00a 3 (1989).

96. *Id.*

97. *Id.*

98. See generally, *CAPs Review Hearings*, *supra* note 6; GREEN, *supra* note 3, at 43-72; U.S. GENERAL ACCOUNTING OFFICE, HAZARDOUS WASTE: EPA'S GENERATION AND MANAGEMENT DATA NEED FURTHER IMPROVEMENT (1990)[hereinafter GAO, HAZARDOUS WASTE]; REGION V, ENVIRONMENTAL PROTECTION AGENCY, EXPERIENCES IN 1989 CAPACITY ASSURANCE PREPARATION (1990)[hereinafter REGION V, EXPERIENCES]; WESTERN GOVERNORS' ASS'N, 1990 FINAL REPORT: OBSERVATIONS ON CAPACITY ASSURANCE THE WESTERN STATES' EXPERIENCE IN IMPLEMENTING CERCLA § 104(c)(9) at 24 [hereinafter WGA, FINAL REPORT].

99. GREEN, *supra* note 3, at 43-72; GAO, HAZARDOUS WASTE, *supra* note 98; REGION V, EXPERIENCES, *supra* note 98, at 1-7; WGA, FINAL REPORT, *supra* note 98, at 14-24; *CAPs Review Hearings*, *supra* note 6, at 164 (testimony of Robert C. Fortuna, Hazardous Waste Treatment Council).

amount of waste present at CERCLA and corrective action sites which would ultimately require treatment and secure disposal at RCRA-approved facilities;¹⁰⁰ the volume of waste that would require management capacity under proposed regulations-including the large volume of waste expected from the cleanup of leaking underground storage tanks;¹⁰¹ and the disposal capacity of salt domes and other geological formations that are capable of preventing the migration of waste.¹⁰² The omission of this information rendered the assessment of treatment capacity inaccurate.

In addition to the effect that the omission of this information had on the capacity estimates, inadequate data measurement and collection procedures also impeded their reliability. In particular, the volume of each type of waste generated, the type of treatment technologies used, the total capacity of management technologies, and the degree of waste minimization were likely to be inaccurate.¹⁰³ In part, this was due to the RCRA Biennial Reports, the instruments used in some states to assess the amount of waste generated.¹⁰⁴ Respondents were likely to interpret the measure differently because the RCRA Biennial Report waste classification mixes independent attributes, thereby creating a measure which is redundant and complex.¹⁰⁵ The General Accounting Office reported in a recent study¹⁰⁶ that management capacity was well measured with the exception of the capacity at cement kilns and similar

100. GREEN, *supra* note 3, at 47; GAO, HAZARDOUS WASTE, *supra* note 98, at 65; CAPs Review Hearings, *supra* note 6, at 164 (testimony of Robert C. Fortuna, Hazardous Waste Treatment Council).

101. GAO, HAZARDOUS WASTE, *supra* note 98, at 65.

102. *Id.*

103. *Id.* at 79-81; GREEN, *supra* note 3, at 46; WGA, FINAL REPORT, *supra* note 98, at 15-16.

104. GAO, HAZARDOUS WASTE, *supra* note 98, at 79-81; GREEN, *supra* note 3, at 46; WGA, FINAL REPORT, *supra* note 98, at 15-16.

105. "The development of a true general classification system with mutually exclusive, exhaustive, and hierarchical categories would fully correct the remaining problem." GAO, HAZARDOUS WASTE, *supra* note 98, at 80; *see also* GREEN, *supra* note 3, at 46; WGA, FINAL REPORT, *supra* note 98, at 15-16.

106. GAO, HAZARDOUS WASTE, *supra* note 98.

forms of incineration.¹⁰⁷ These measures were not sufficiently specific to assure that respondents would interpret the question in the same way.¹⁰⁸ Misclassification of waste and treatment capacity distorted the data on specific waste generation and available treatment. This was particularly relevant when assessing the treatment capacity of cement kilns and other types of incineration. Incinerators are one of the most difficult treatment facilities to site,¹⁰⁹ and thirteen Northeastern states have projected capacity shortfalls for incinerator treatment.¹¹⁰ A liberal estimate of incinerator capacity could thwart the goal of assuring sufficient treatment.

Furthermore, the measures of waste minimization would not produce valid data on changes in waste generation per unit of production.¹¹¹ The GAO reported: "The measures do not account for the production of different products from one year to the next that may generate unequal amounts of hazardous waste. The results will be misleading because incidental changes in production will be mixed with, and thus will obscure, actual waste minimization."¹¹² Also, states used varied approaches to estimate waste reduction and measured reductions differently, both of which made comparison among states difficult.¹¹³

Finally, the Administrator did not require the states to use the same data collection instrument. States used different RCRA Biennial Reports or state instruments,¹¹⁴ and some states supplemented the data with additional information such as hazardous waste generation from

107. *Id.* at 80.

108. "If respondents assume either unlimited demand for their product or waste with low heating value, the capacity of this form of incineration could be significantly overestimated. Some overestimation of capacity is also likely in some versions of this reporting instrument because some respondents may not have considered permit restrictions in reporting maximum capacity." *Id.*

109. LEGISLATIVE COMMISSION, *supra* note 9, at 40.

110. *CAPs Review Hearings*, *supra* note 6, at 41.

111. GAO, HAZARDOUS WASTE, *supra* note 98, at 83; GREEN, *supra* note 3, at 44; REGION V, EXPERIENCES, *supra* note 98, at 17-18.

112. GAO, HAZARDOUS WASTE, *supra* note 98, at 80.

113. GREEN, *supra* note 3, at 65.

114. GAO, HAZARDOUS WASTE, *supra* note 98, at 83; GREEN, *supra* note 3, at 44; REGION V, EXPERIENCES, *supra* note 98, at 11.

small quantity generators.¹¹⁵ The continued use of data collection instruments made comparison of states' capacity difficult, if not impossible, and capacity estimates inaccurate.¹¹⁶

To conclude, the procedures for measuring and collecting data were inadequate and required revision. The inability to compare the data from individual states resulted in an unreliable assessment of which states fall short of sufficient capacity. This was relevant to proposals for requiring capacity under a national basis. Under such a plan, shortfall states would be required to create the capacity necessary to meet national needs; however, enough capacity may not be created. Data that is both reliable and uniform would be necessary to enforce such a plan. Also, acting on the basis of inaccurate data could result in the creation of unneeded capacity or in the case of incinerator treatment, not enough capacity. Finally, imposing sanctions on the basis of inaccurate data is morally reprehensible.

Due to the inaccuracies in the system, the EPA improved the Biennial Report so that it did not mix variables. However, the EPA still does not require the states to use the Biennial Report as a source of information for their CAPs. The EPA both narrowed and expanded the scope of the CAPs. The EPA required the states to report on the Subtitle C hazardous waste including waste from federal facilities and non-RCRA Subtitle C hazardous waste that is considered hazardous under state regulations and is managed in hazardous waste management systems.¹¹⁷ The EPA also required data for on-site, captive, and commercial facilities for the base year but only required commercial facility data to be presented for projections. Finally, the EPA excluded

115. GAO, HAZARDOUS WASTE, *supra* note 98, at 83-85; GREEN, *supra* note 3, at 53; WGA, FINAL REPORT, *supra* note 98, at 17-18.

116. GAO, HAZARDOUS WASTE, *supra* note 98, at 102.

SARA capacity assurance will be seriously impaired because of its reliance on the RCRA reporting system and the fact that the data from different years and different data collection efforts will be used. Necessary data will be entirely missing in states that did not use the revised RCRA reporting system instrument, and previous measurement problems will persist. The EPA has attempted to compensate for the missing data by providing states with assumptions based on engineering judgments. However, the EPA acknowledges that these do not reflect actual state conditions. The resultant uneven quality of the data will seriously weaken confidence in SARA capacity assurances.

Id.

117. OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, ENVIRONMENTAL PROTECTION AGENCY, GUIDANCE FOR CAPACITY ASSURANCE PLANNING, OSWER Directive No. 9010.02 at 1-16 to 1-17 (1993)[hereinafter 1993 GUIDANCE].

EPA excluded data on the generation and/or management of waste generated by small quantity generators; non-RCRA waste that may use Subtitle C hazardous waste management capacity; waste disposed through discharge to sewers or publicly-owned treatment works; waste disposed through direct discharge to surface waters under the National Pollutant Discharge Elimination System; mixed hazardous/radioactive wastes; and projections of one-time waste generation.¹¹⁸ The changes have made comparisons more equitable; however, some of the inaccuracies will persist.

2. *Provision's Goals.* The goals of the capacity assurance requirement were unclear. Congress intended to provide for "newer, safer" hazardous waste management facilities;¹¹⁹ however, Congress did not clarify at which level capacity was desired. Because the provision made each state responsible for assuring management capacity, Congress may have intended to provide for capacity at the state level. However, Congress authorized the use of interstate agreements to assure adequate capacity and therefore, arguably acquiesced capacity at the regional level.¹²⁰ At least one source has indicated otherwise. The Department of Justice stated on behalf of the EPA that the capacity assurance requirement was intended to assure sufficient overall national capacity so as to allow the national market to continue unfettered.¹²¹ The EPA's proposed revisions to the 1993 Directive evidenced their uncertainty about the clarity of the regulation with regard to the provision's goals.¹²² The EPA has since implemented the provision using a three-phased approach where the Administrator first determines national-level management capacity shortfalls before requiring shortfall states to create additional capacity or to reduce waste.¹²³

118. *Id.*

119. S. REP. NO. 11, 99th Cong., 1st Sess. 22 (1985); see notes 68-72 and accompanying text.

120. 42 U.S.C. § 9604(c)(9). Senator Chafee stated that "a site in every state is not required," implying that capacity at the state level is not necessary. S. REP. NO. 11, 99th Cong., 1st Sess. 22 (1985).

121. GREEN, *supra* note 3, at 88 (citing United States Amicus Curiae Brief at 9, National Solid Wastes Management Ass'n v. Alabama Dept. of Env'tl. Management, 910 F.2d 713 (11th Cir. 1990)).

122. 1993 GUIDANCE, *supra* note 117.

123. *Id.*

While Congress intended to provide for the necessary hazardous waste management capacity (although the level of capacity was unclear), the EPA also interpreted the capacity requirement as a mechanism to address concerns of equity.¹²⁴ The EPA found that in order to more evenly distribute the costs and benefits associated with hazardous waste management, Congress required the generating states to provide assurances of adequate capacity.¹²⁵ The EPA reasoned that by doing so, Congress forced states lacking adequate capacity to site newer, safer hazardous waste management facilities; to reduce waste generation; or to enter into interstate agreements which would effectively deal with capacity shortages.¹²⁶ Theoretically, states having sufficient capacity could refuse to enter into interstate agreements with states unable to reciprocate.¹²⁷ As a result, needed capacity would be sited in states lacking adequate capacity,¹²⁸ thereby more equitably distributing the costs incurred by communities hosting hazardous waste management facilities.

While the EPA interpreted Congress' intent as one where additional treatment capacity would be created in an equitable fashion, Congress did not make this explicit. Instead, Congress emphasized the creation of newer, safer hazardous waste management to meet the perceived national capacity crisis. Depending on the level of capacity sought, the implementation of the capacity assurance requirement can frustrate this goal as well as raise concerns not anticipated by Congress. For example, requiring state sufficiency in treatment capacity could create unnecessary treatment capacity,¹²⁹ thereby creating a system which

124. 1989 GUIDANCE, *supra* note 85, at 78.

125. *Id.*

126. [P]ublic opposition to the creation and permitting of facilities that manage wastes generated in other states is greater than opposition [to the creation of] facilities designed to manage wastes generated within the same state or locality. By requiring the generating states to provide assurances of access to capacity for their own wastes, Congress placed responsibility [of siting additional facilities] on the states most able to create and to permit additional capacity. *Id.*

127. *Id.*

128. *Id.*

129. GREEN, *supra* note 3, at 89 ("[U]nder the current state or regional approach, the CAP process may create artificial capacity shortfalls, since states with facilities may refuse to join agreements.")

emphasizes increased treatment capacity rather than waste reduction and which burdens more communities and the environment.

For certain treatment technologies where adequate national capacity but state imbalances exist, the CAP requirement had the effect of creating excess capacity. This is so because the capacity assurance plans did not reflect actual hazardous waste flows. The states were required to assure the availability of adequate treatment for all hazardous waste generated within their borders and for the out-of-state waste for which the state agreed to provide treatment.¹³⁰ Congress did not require the states to guarantee the availability of capacity, nor did Congress authorize the states to exert statutory or regulatory control over the interstate hazardous waste market.¹³¹ (Attempts to control the interstate hazardous waste market have consistently been struck down as violative of the Commerce Clause.¹³²) The states were only required to assure adequate treatment capacity for their wastes; they did not need to incorporate actual waste flows into their plans.

The market dictates where actual hazardous wastes are disposed.

In choosing a specific firm, waste generators presumably consider the availability of appropriate treatment or disposal technologies, given the waste type, government regulations, and company preferences such as waste recovery or recycling; the relative costs of each waste management option, including shipping, storage, transportation, and taxes; and the reputation and operational record of a company, which reflects a generator's concerns about potential future liabilities.¹³³

In certain regions, states may submit plans estimating certain treatment

130. 42 U.S.C. § 9604(c)(9)(1993).

131. *Hazardous Waste Treatment Council v. South Carolina*, 945 F.2d 781, 794-95 (4th Cir. 1991); *see also* *National Solid Wastes Management Ass'n v. Alabama Dep't of Env'tl. Management*, 910 F.2d 713, 721-22 (11th Cir. 1990), *cert. denied*, 111 S.Ct. 2800 (1991).

132.. *National Solid Wastes Management Ass'n*, 910 F.2d at 721 ("A state statute that erects a barrier to interstate commerce may nonetheless be upheld where Congress authorizes the state to regulate in such a manner.... Such congressional intent or authorization for states to affect interstate commerce, however, must be 'expressly stated' and 'unmistakenly clear.'"); *Hazardous Waste Treatment Council*, 945 F.2d 781; *Chemical Waste Management, Inc. v. Hunt*, 112 S.Ct. 2009 (1992); *see also supra* note 23 and accompanying text.

133. GREEN, *supra* note 3, at 89.

capacity shortfalls which in reality do not exist.¹³⁴ States, however, are required to create capacity, to reduce waste or to enter into interstate compacts. If states fail to do so, the EPA is authorized to refuse to allocate Superfund remedial action funds.¹³⁵ Therefore, the capacity assurance requirement may have the effect of creating excess capacity.

EPA data suggests that adequate national capacity exists for hazardous waste.¹³⁶ However, the EPA has identified major shortfalls for specific technologies, including solids and sludge incineration.¹³⁷ Creating capacity for treatment other than incineration or other treatments with shortfalls unnecessarily burdens citizens and the environment. Also, additional commercial facilities may be unable to compete with out-of-state facilities, thereby forcing the state to subsidize the facility.¹³⁸ The operation of commercial facilities with low demand could increase waste management costs. Increased costs and inaccessibility to commercial facilities might lead to illegal dumping¹³⁹-a practice that Congress wished to curtail.¹⁴⁰ At worst, states may simply be unable to maintain a commercially viable facility and fail to meet the capacity assurance requirements.

Another concern is that the capacity assurance requirement emphasizes the siting of facilities rather than waste reduction. While Congress did not intend to allow waste reduction efforts to meet the

134. GREEN, *supra* note 3, at 90 ("Some studies have found that, although adequate capacity is available on a national level, regional imbalances may exist.") (citing *Report To EPA Sees Hazwaste Capacity Shortfalls*, WASTE AGE, May, 1988, at 154-55; Thomas W. Devine and T. Michael Taimi, *Hazwaste Capacity Issues*, WASTE AGE, Sept. 1988, at 50-51).

135. 42 U.S.C. § 9604(c)(9)(1993).

136. *Interstate Transportation Hearings*, *supra* note 3, at 80 (statement of Don R. Clay, Assistant Administrator for Office of Solid Waste and Emergency Response, Environmental Protection Agency).

137. *Id.* at 88-89 (statement by Sylvia K. Lowrence, Director, Office of Solid Waste, Environmental Protection Agency).

138. GREEN, *supra* note 3, at 89.

139. See GAO, *ILLEGAL DISPOSAL*, *supra* note 72.

140. S. REP. NO. 11, 99th Cong., 1st Sess. 22 (1985).

requirements of CAPs,¹⁴¹ the EPA incorporated this into its implementation of the provision.¹⁴² The creation of additional capacity may remove incentives for waste generators to reduce waste.¹⁴³ This could be avoided by requiring states to first find waste reduction measures to meet capacity assurance requirements and if the state lacks sufficient capacity, to then require the siting of additional facilities.¹⁴⁴ As the waste reduction measures ease the burden of meeting the CAP requirement, the statute already creates incentives.¹⁴⁵ State sufficiency could then foster waste reduction.

Despite the aforementioned concerns, capacity at the state level advances equitable distribution of the costs associated with the siting of hazardous waste treatment facilities. Commentators argue that without utilizing state statutory or regulatory controls, Congress created a powerful means of forcing equity into the hazardous waste market.¹⁴⁶ The capacity assurance requirement threatens noncomplying states with the loss of Superfund remedial action funding. States with insufficient capacity must at least site additional facilities, enter into regional agreements, or minimize waste generation. Because state sufficiency encourages states to take responsibility for the treatment and disposal of their wastes, requiring treatment capacity at the state level is a step in the direction toward ensuring the equitable distribution of the costs associated with hazardous waste disposal. In turn, this raises a community's awareness of waste disposal issues and may have the effect of causing communities to handle their own waste more responsibly or

141. The legislative history and Senator Chafee's remarks do not refer to waste minimization. S. REP. NO. 11, 99th Cong., 1st Sess. 22 (1985).

142. 1989 GUIDANCE, *supra* note 85, at 78.

143. GREEN, *supra* note 3, at 97.

144. The NGA [National Governors' Association] Work Group on Waste Minimization and Source Reduction recommended that each state recognize hazardous waste minimization as the highest priority option for managing hazardous waste. Members agreed that waste minimization constitutes sound environmental policy, serving as one of the best ways of reducing the health and environmental risks associated with hazardous waste.

DOMENIC FORCELLA, NATIONAL GOVERNORS' ASSOCIATION, THE ROLE OF WASTE MINIMIZATION 21 (1989).

145. GREEN, *supra* note 3, at 97.

146. *Id.* at 91.

reduce their waste generation.

In order for the provision to address equity concerns, it must compel states with insufficient capacity to provide for additional capacity. To do so, the imposition of sanctions is necessary. The provision threatens non-compliers with the loss of Superfund remedial action funding. Commentators and legislators have questioned the use of such a drastic penalty.¹⁴⁷ The withholding of Superfund monies will not protect the environment and may not guarantee sufficient capacity in the future. The question of what degree of non-compliance warrants the imposition of so severe a sanction has not been answered.

Requiring capacity at the regional level strikes a balance between the aforementioned concerns. Again, certain regions may lack capacity for a treatment technology for which overall national capacity exists. Although this will likely lead to the creation of excess capacity, it will force the equitable distribution of treatment facilities within a region. This will inevitably lessen the burden on communities currently hosting commercial hazardous waste facilities because shortfall states will be required to site additional facilities or lessen waste flow and in turn, this will have an effect on the market.

The CAP provision could encourage regional capacity and equitable distribution at this level. Regional agreements appear to work best where the regional market has already created sufficient capacity.¹⁴⁸ The Western Governors' Association formed a regional agreement and was highly successful in developing mutually acceptable solutions to its interstate waste problems.¹⁴⁹ In contrast, Green found that the inequitable distribution of costs and benefits was at the core of New York's decision not to join the Northeastern States regional agreement.¹⁵⁰ Presently, the provision does not require states with adequate capacity to enter into interstate agreements. The incentives to join a regional agreement are diminished when states with adequate capacity are faced with inequitable distribution of the costs incurred when joining one. While the regional capacity requirement may work

147. *CAPs Review Hearings*, *supra* note 6, at 282; GREEN, *supra* note 3, at 96.

148. *CAPs Review Hearings*, *supra* note 6, at 281 (Testimony of Sylvia K. Lowrence, Director, Office of Solid Waste and Emergency Response, Environmental Protection Agency.) ("They [Western Governor's Association] tend to be a captive group; they don't ship a lot of waste out of the region, so they are able to get closer and closer over time...to real flows and real needs.")

149. *Id.* at 190.

150. GREEN, *supra* note 3, at 92.

well with captive regions, such as the Western states' region, the interstate agreement fails in regions similar to the Northeast. The Northeast region must site additional commercial landfills to compensate for New York's refusal to enter into the agreement, thereby forcing equity into the market.

Finally, requiring capacity at a national level provides the least interference with the hazardous waste market. There is no threat that excess capacity will be created. However, implementation of the CAP provision on a national basis fails to address equity concerns. Communities such as Western New York and Emelle, Alabama, which host commercial landfills with capacity that lasts until the next millennium will continue to be burdened by the costs of disposing of the nation's hazardous wastes.¹⁵¹

IV. RESOLVING THE INTERSTATE HAZARDOUS WASTE CONTROVERSY

The tension between equitable distribution of the costs and benefits of hazardous waste treatment and the creation of efficient, economical and accessible hazardous waste treatment is not easily resolved. The two interests are at odds with each other. The dispersment of treatment facilities will most likely result in excess capacity. However, it will instill equitable distribution of hazardous waste treatment and disposal facilities. State attempts to instill equity in a concentrated hazardous waste market are already constrained by the Commerce Clause, and the current revision to the capacity assurance provision wholly fails to address these concerns. The following section describes the legal constraints on the state attempts to control the hazardous waste market and argues that these constraints and the revision to the CAP requirement impose upon Western New York the burden of being the nation's hazardous waste dump. To conclude, this section argues that a revision of the capacity assurance requirement which strikes a balance between these two competing interests is the best mechanism for resolving this debate.

A. *Legal Restraints on States*

1. *Commerce Clause.* States have attempted to control the interstate hazardous waste market in order to assure capacity and to create equity. State protectionist measures have taken the form of import bans, differential fees and reciprocal compacts. However, the

151. See Powers, *supra* note 16.

executive orders that discriminate against hazardous waste on the basis of state origin violate the Commerce Clause. While the restraints imposed on the states cannot be found in the express words of the Commerce Clause, the bounds of the restraints have emerged from case law.

In *Pike v. Bruce Church, Inc.*,¹⁵² the Court defined the test to be applied when weighing the validity of statutes which affected interstate commerce. The Court held that where the statute regulates evenhandedly to effectuate a legitimate local interest and its effects on interstate commerce are only incidental, it will be upheld unless the burden on interstate commerce is clearly excessive in relation to the local benefits.¹⁵³ The extent of the burden tolerated will depend on the nature of the local interest and on whether it could be promoted as well with a lesser impact on interstate activities.¹⁵⁴ The Court applied this test in *City of Philadelphia v. New Jersey*,¹⁵⁵ and found unconstitutional a statute which prohibited the importation of most "solid or liquid waste which originated or was collected outside the territorial limits of the State."¹⁵⁶ The Supreme Court adhered to the reasoning that "our economic unit is the Nation...as its corollary...the states are not separable economic units."¹⁵⁷ The principle is that one state in its dealings with another may not place itself in a position of economic isolation.¹⁵⁸ However, the Supreme Court did not find this case dispositive on the facts of whether the legislation was meant as an economic protectionist device or a safeguard. Instead, because New Jersey discriminated against articles of commerce based solely on the state of origin, the Supreme Court found the statute per se invalid.¹⁵⁹

Recently, in *National Solid Waste Management v. Alabama*

152. 397 U.S. 137 (1970).

153. *Id.* at 142.

154. *Id.*

155. 437 U.S. 617 (1978).

156. *Id.* at 617-18.

157. *Id.* at 623.

158. *Id.*

159. *Id.* at 627.

Department of Environmental Management,¹⁶⁰ the Court of Appeals struck down an Alabama statute, the "Holley Bill."¹⁶¹ It prohibited an owner or operator of a commercial hazardous waste facility located within the state from treating or disposing of hazardous waste generated in a state other than Alabama, if the other state either prohibited the treatment or disposal of hazardous waste within its borders and had no facility for such; or had no facility existing within that state for the treatment or disposal of hazardous waste; or had not entered into a regional agreement for the disposal or treatment of hazardous waste to which Alabama was a signatory.¹⁶² The statute further prohibited commercial waste management facilities in Alabama from contracting with a state other than Alabama to satisfy that state's capacity assurance obligation.¹⁶³ Again, the Court of Appeals recognized that when the dangers inherent in an object's movement "far outweigh" its worth in interstate commerce, a state can prohibit transportation of the object across state lines.¹⁶⁴ However, following the holding in *Philadelphia*, the Court of Appeals found the "Holley Bill" to violate the Commerce Clause by prohibiting the importation of hazardous wastes into Alabama because it was a barrier to interstate commerce and discriminated on the basis of origin.¹⁶⁵ Moreover, the Court did not find an express authorization by Congress to allow the restriction on interstate commerce by enacting the SARA amendments to CERCLA.¹⁶⁶

Similarly, in *Hazardous Waste Treatment Council v. South Carolina*,¹⁶⁷ the Court of Appeals struck down two South Carolina statutes, executive orders and a regulation. One statute required South Carolina hazardous waste treatment and disposal facilities to give preference to in-state generators and prohibited owners or operators of

160. 910 F.2d 713 (11th Cir. 1990), *cert. denied*, 111 S.Ct. 2800 (1991).

161. Ala. Code § 22-30-11 (Supp. 1989).

162. *National Wastes Management*, 910 F.2d at 717 n.7.

163. *Id.* at 717.

164. *Id.* at 720-21. This exception is commonly referred to as the quarantine cases which have upheld state legislation that facially discriminates against out-of-state commerce involving articles that were highly dangerous. *Id.*

165. *Id.* at 720-21.

166. *Id.* at 720.

167. 945 F.2d 781 (4th Cir. 1991).

hazardous waste treatment facilities within South Carolina from accepting waste generated in a state which has not entered into an interstate or regional agreement for the safe treatment of hazardous waste pursuant to federal CERCLA.¹⁶⁸ The other statute required that a hazardous waste facility operator obtain a permit and limit the amount of hazardous material that could be buried. In addition, the operator was required to reserve the same capacity to dispose of hazardous waste generated in South Carolina that was disposed of in the previous year.¹⁶⁹ The executive order required in-state disposal facilities to reserve a portion of the cap of total hazardous waste buried annually.¹⁷⁰ Finally, the regulation required applicants for the expansion or establishment of treatment facilities for hazardous wastes to demonstrate need; however need could not be based upon hazardous waste generated outside South Carolina.¹⁷¹ Although the laws did not ban out of state hazardous wastes, the Court of Appeals found the laws to facially discriminate against objects of commerce on the basis of origin, thereby erecting a barrier against interstate movement.¹⁷² South Carolina failed to show that prohibiting the burying of out-of-state wastes advanced the health and safety interests of the people of South Carolina when the burying of in-state wastes created the same danger.

Finally, in *Chemical Waste Management, Inc. v. Hunt*,¹⁷³ the Supreme Court struck another Alabama act that imposed an additional fee on out-of-state hazardous wastes that are disposed of in-state. Chemical Waste Management also challenged a fee on all hazardous wastes generated and disposed of in Alabama. The Supreme Court refused to review the Court of Appeals decision that the evenhandedly applied fee was constitutional. In accordance with the aforementioned cases, the Supreme Court held the differential tax to be invalid. Alabama had not met the burden of showing the unavailability of nondiscriminatory alternatives adequate to preserve the local

168. *Id.* at 785.

169. *Id.*

170. *Id.* at 786.

171. *Id.*

172. *Id.* at 790-92.

173. 112 S. Ct. 2009 (1992).

interests.¹⁷⁴ The Court indicated that a per-mile tax on all vehicles transporting such waste across state roads or an evenhanded cap on the total tonnage landfilled at the commercial landfill would curtail the volume from all sources as the localities wished and thus alleviated their concerns by less discriminatory means.¹⁷⁵

Alabama asserted that the CAP provision requires assurances, and therefore, states have legitimate state concerns to burden interstate commerce.¹⁷⁶ In response, the Court in *National Waste Management* found nothing in the SARA Cap provision that evidence a Congressional intention for each state to be able to close its borders to wastes generated in other states in order to force those states to meet the federally mandated hazardous waste management requirements.¹⁷⁷ The Court stated, "If Congress intended to allow the states to restrict the interstate movement of hazardous wastes as Alabama has tried to do, Congress could (and still can) plainly say so."¹⁷⁸ Because state attempts to control the hazardous waste market have been consistently struck down as unconstitutional, revision of the capacity assurance requirement would best instill equity into the hazardous waste market.

2. *Enforcement Suits.* New York State has brought a suit against William K. Reilly in his capacity as Administrator of the Environmental Protection Agency to compel defendant to perform his non-discretionary duties under 42 U.S.C. § 9604 (c)(9).¹⁷⁹ New York State contends that the EPA continues to provide monies to states which the EPA has determined do not have adequate availability of facilities in derogation of its mandatory duty to withhold such funds.¹⁸⁰ The suit survived, among other motions, defendant's motion to dismiss for failure to state a claim upon which relief can be granted.¹⁸¹ The court applied the rule

174. *Id.* at 2015.

175. *Id.* at 2013.

176. *National Solid Waste Management*, 910 F.2d at 720.

177. *Id.* at 721.

178. *Id.* at 721-22.

179. *New York v. Reilly*, 143 F.R.D. 487 (N.D.N.Y. 1992).

180. *Id.*

181. *Id.*

that a complaint should not be dismissed for failure to state a claim unless it appears beyond doubt that the plaintiff can prove no set of facts in support of its claim which would entitle it to relief.¹⁸² The court held that the plaintiff's allegations are sufficient to maintain a cause of action under sections 9659 and 9604(c)(9).¹⁸³ The court added its concern about whether plaintiffs upon further discovery would be able to present sufficient evidence to withstand a motion for summary judgment.

The use of enforcement suits to compel the EPA to sanction noncomplying states as a means of instilling more equitable distribution of treatment facilities is probably not a viable option. Although the Director of the Office of Solid Waste and Emergency Response testified as to having personal concerns as to the efficacy of the sanction and indicated that preliminary discussions had occurred with regard to the EPA's authority to impose tiered sanctions,¹⁸⁴ there is little evidence that the EPA failed to carry out its mandated duties. The provision grants the EPA wide discretion to determine if the states' CAPs are adequate. Practicalities dictate that the EPA allow the states abundant time to create new capacity as the process for siting facilities continues for years as well as the promulgation and implementation of new regulations, i.e. waste reduction measures.

Even if some states have failed to meet their milestones, precedent holds that when a court reviews an agency's actions pursuant to an ambiguous law, the court should defer to the agency's answers.¹⁸⁵ Also, discretion is committed to an agency when the statute is written so that the court would have no meaningful standard against which to judge the agency's exercise of discretion.¹⁸⁶ This is applicable to the CAP provision. Before any sanctions can be imposed the Administrator must find the CAP inadequate. No qualifying language in the legislative history or by Senator Chafee informs the court's understanding of "adequate." Again considering the complexity of the task of determining capacity, the court would have to defer to the agency.

182. *Id.* at 15886.

183. *Id.* at 15888.

184. *CAPs Review Hearings, supra* note 6, at 282.

185. *Contract Courier Services Inc. v. Research and Special Programs Admin., U.S. Dep't. of Transportation*, 924 F.2d 112, 115 (7th Cir. 1991).

186. *Administrative Procedure Act*, 5 U.S.C.A. § 701(a)(2); *Animal Legal Defense Fund v. Madigan*, 781 F.Supp. 797, 800 (D.D.C.1992).

The use of enforcement suits is not a viable means of providing equity in the hazardous waste disposal market. Revision of the capacity assurance statute is the best method of addressing this issue. The following section analyzes some of the solutions offered to solve the issue.

B. *Analysis Of Proposed Solutions*

1. *Import Bans, Differential Fees and Regional Compacts.* Several solutions to revise the CAP provision have been proposed. Generally, these include: authorizing states to restrict the transportation of hazardous waste from out-of-state generators;¹⁸⁷ authorizing states to deny permits for hazardous waste facilities when capacity from that state in which they are located is insufficient;¹⁸⁸ authorizing regions to ban hazardous waste imports pursuant to a regional compact;¹⁸⁹ and authorizing states to impose fees on hazardous waste imported from out-of-state.¹⁹⁰ While these proposals may force equity into the hazardous waste market, they neglect concerns of excess capacity and may inadvertently create a more complex system as they involve controls on the actual hazardous waste flows. This section will analyze the proposals for their effectiveness in addressing equity concerns within the confines of the hazardous waste market.

The proposals advocating bans or restrictions on the importation of hazardous waste force treatment capacity at the state level. State controls foreclose treatment options causing states lacking certain treatment capacity to site additional facilities. If demand for a particular hazardous waste treatment technology is low, state subsidy¹⁹¹ or increased prices may be necessary. The latter may result

187. S. 592, 102nd Cong., 1st Sess. § 2 (1991); H.R. 607, 102nd Cong., 1st Sess. § 2 (1991); H.R. 2216, 102nd Cong., 1st Sess. § 3 (1991).

188. S. 443, 103rd Cong., 1st Sess. § 3(b)(7) (1993); S. 592, 102nd Cong., 1st Sess. § 2 (1991).

189. Jonathon Stone, *Supremacy and Commerce Clause Issues Regarding State Hazardous Waste Import Bans*, 15 COLUM. J. ENVTL. L. 1, 29-30 (1990).

190. S. 443, 103rd Cong., 1st Sess. § 1 (1993).

191. GREEN, *supra* note 3, at 91.

in illegal dumping¹⁹² - a practice Congress intended to curtail.¹⁹³ Finally, the use of bans or restrictions is counterproductive to waste reduction. States cannot both encourage waste minimization and maintain demand for hazardous waste treatment facilities sited within the state after out-of-state capacity has been foreclosed.¹⁹⁴

The use of restrictions or bans on imported hazardous waste disperses the costs associated with hazardous waste disposal. The state controls would advance state sufficiency and may lessen public opposition to siting these facilities.¹⁹⁵ While the measures address equity concerns, their use may have undesirable consequences for the market and for policy. Therefore, the CAP provision should not be revised to authorize states to ban or restrict imports.

The proposal authorizing states to impose differential fees on out-of-state waste has similar consequences. If fees on out-of-state waste are set high enough, they, in effect, act as a ban or act to severely restrict the flow of hazardous waste. Differential fees can divert the waste market away from the state imposing the tax. Theoretically, if all states engaged in imposing differential fees, generators might create demand for facilities within the state in which they operate, thereby creating excess capacity. This excess capacity is subject to the problems mentioned above. At any rate, differential fees have the effect of increasing management costs which, again, may lead to illegal dumping.¹⁹⁶

On the other hand, differential fees could address other concerns of host communities. The tax forces some waste generators to utilize less expensive treatment elsewhere. Also, the revenue obtained from the fees might provide some compensation to the host state for potentially adverse environmental effects and the additional oversight that results

192. *Interstate Transportation Hearings*, *supra* note 6, at 82 (Statement of Don R. Clay, Assistant Administrator for Office of Solid Waste and Emergency Response, Environmental Protection Agency).

193. S. REP. NO. 11, 99th Cong., 1st Sess. 22 (1985).

194. See Louis J. Thibodeaux, *Hazardous Material Management In The Future*, 24 ENVTL. SCI. & TECH. 456 (1990) (proposing that complete waste recycling is impossible).

195. GREEN, *supra* note 3, at 92; see LEGISLATIVE COMMISSION, *supra* note 9, at 40 (finding off-site facilities more difficult to site than on-site facilities).

196. See *supra* notes 135-43 and accompanying text.

from managing imported waste.¹⁹⁷ Compensation may serve to assuage state governments for enduring the political consequences of siting new facilities more frequently than would be necessary for exclusively in-state wastes.¹⁹⁸ Reasonable differential fees have potential to alleviate some equity concerns within the constraints of the hazardous waste market.

Another proposal is to authorize states to enter into compacts which can restrict the flow of interstate hazardous waste.¹⁹⁹ This differs from the CAP provision in that states are only authorized to plan for hazardous waste pursuant to their regional compacts.²⁰⁰ By altering the actual flow of hazardous waste, regions redistribute the costs of housing hazardous waste facilities. Also, regional demand for specific technologies is likely to be greater than any one state's demand. Therefore, additional facilities that need to be sited in a region tend to be commercially viable. While regional compacts may tend to create excess capacity in certain treatment technologies, this will occur to a much lesser extent than excess capacity generated under a state sufficiency requirement. However, formal compacts have been criticized for their lack of flexibility.²⁰¹ Once compacts are established, regions may exclude states regardless of their efforts to create additional capacity.²⁰²

197. *Interstate Transportation Hearings*, *supra* note 3, at 82. *But see* PORTNEY, *supra* note 42, at 25 (discussing the ineffectiveness of the compensation theory); *see supra* notes 55-57 and accompanying text.

198. *Interstate Transportation Hearings*, *supra* note 3, at 82.

199. For a comparison of formal interstate compacts and CAPs interstate compacts, *see* Wynne & Hamby, *supra* note 23, at 632-33; Stone, *supra* note 189, at 29-30.

200. That Congress expressly authorized the use of import bans for states pursuant to approved interstate compacts pursuant to the Low-Level Radioactive Waste Policy Act 42, U.S.C. § 2021 (1988), supports the contention that Congress did not intend the same result for CERCLA § 9604(c)(9). *National Solid Wastes Management Ass'n v. Alabama Dep't Env'tl. Management*, 910 F.2d 713, 721-22 (11th Cir. 1990), *cert. denied*, 111 S.Ct. 2800 (1991).

201. *Interstate Transportation Hearings*, *supra* note 6, at 82 (Statement of Don R. Clay, Assistant Administrator, Office of Solid Waste and Emergency Response, Environmental Protection Agency).

202. *Id.*

2. *National Capacity Basis.* The EPA revised the Capacity Assurance Plan Guidance to the States.²⁰³ The EPA now requires a three-phased approach to assessing treatment capacity.²⁰⁴ Under the new approach, the EPA will make an initial national-level determination of shortfalls in management capacity.²⁰⁵ At the first phase, states will only be required to submit base year data on generation of wastes and on management capacity and their projections over a twenty-year period.²⁰⁶ The EPA will then conduct a national capacity assessment to determine whether sufficient hazardous waste exists nationwide for the twenty-year projection period for each CAP Management Category.²⁰⁷ If adequate national capacity exists for all CAP Management Categories, then the EPA will not require Phase 2 submissions from the states.²⁰⁸ If national shortfalls are projected for any CAP Management Category, each state that the EPA identifies as a "shortfall state" for that CAP Management Category must address its portion of the net national shortfall by siting additional facilities, reducing waste generation or entering into interstate agreement.²⁰⁹

This directive addresses the concerns of excess capacity by requiring only that capacity which is needed. The plan better reflects actual waste flows than did the 1989 Guidance. However, if adequate national capacity exists, with the exception of one or two Management Categories, this proposal will result in the dispersing of only one or two specific types of hazardous waste management facilities.²¹⁰ This

203. 1993 GUIDANCE, *supra* note 117.

204. 1993 GUIDANCE, *supra* note 117, at 1-7.

205. *Id.* at 1-10 to 1-14.

206. *Id.* at 1-12.

207. *Id.* at 1-13 to 1-14. CAP Management Categories include: Metals Recovery; Solvents Recovery; Other Recovery; Incineration-liquids; Incineration-sludges/solids; Energy Recovery-kilns, boilers, furnaces; Aqueous Inorganic Treatment; Other Treatment (e.g. pretreatment including settling and neutralization); Sludge Treatment; Stabilization; Land Treatment; Landfill; Deepwell (underground) Injection; Other Disposal. SUMMARY REPORT, *supra* note 31, at 5.

208. 1993 GUIDANCE, *supra* note 117, at 1-15.

209. *Id.*

210. *Interstate Transportation Hearings*, *supra* note 6, at 88-89; *see supra* notes 136-37.

directive, therefore, fails to address equity concerns and continues to impose the burden of hosting commercial hazardous waste upon Western New York and other communities similarly situated.

A system which requires capacity at the regional level best addresses all concerns and alleviates some of the burden on communities like Western New York. This strategy, arguably, may convince a recalcitrant state or community to host a private facility that would accept local as well as imported wastes.²¹¹ The sense that the community is accepting some costs, that of hosting the facility, in return for some benefit, the use of other management technologies located elsewhere, underlies this strategy. Under the present system, states are given the opportunity to address equity issues using the aforementioned strategy through interstate agreements. The revision does not emphasize the sharing of the treatment facilities and therefore magnifies the perception of inequity. Once national capacity for a Management Category is deemed adequate, consideration of which states are providing the capacity for that Category is irrelevant.

Most important, there exist treatment technologies that provide adequate national capacity but overburden too few states. Commercial hazardous waste landfills exemplify this.²¹² The revision does not provide incentive for states to more evenly distribute the costs associated with hosting such facilities. To conclude, the proposal to assess capacity on a national basis fails to attend to equity concerns.

C. *Statutory and Regulatory Reform*

The CAP provision and implementation require revision in order to balance the competing interests of equitable distribution of the costs of hazardous waste disposal and the creation of economical, efficient capacity. Establishing capacity at the regional level best effectuates this needed balance. Statutory or regulatory reform requiring capacity at the regional level provides for more equitable distribution of treatment facilities while having the potential of creating less excess capacity than a state sufficiency requirement would engender. In addition, the likelihood that demand will be sufficient to maintain a facilities' commercial viability is greater at the regional level than at the state level.

To effectuate these changes, Congress must revise the capacity assurance requirement. Formal regional compacts which ban hazardous waste are not necessary. A provision which requires states with

211. GREEN, *supra* note 3, at 93.

212. See *supra* note 15 and accompanying text.

shortfall capacity to site needed facilities will influence the hazardous waste market regardless of whether the states have controls on the market. Also, the perception of equity will be enhanced.

In addition, Congress must authorize the EPA to create a tiered level of sanctions where states failing to meet milestones will be penalized gradually.²¹³ This will retain the credibility of the provision. Finally, the EPA needs to create a data measurement and collection procedure that provides uniform and reliable data. The EPA should require all states to use the same updated biennial report instrument as a source of waste generation. Reliable data is crucial to the efficacy of the CAPs' goals.

V. CONCLUSION

The interstate hazardous waste controversy has only intensified with the enactment of the capacity assurance requirement. Increasing public opposition to the siting of facilities and diminished capacity in certain treatment technologies suggest that the problem will increase for Western New York. The equitable distribution of the costs of hazardous waste disposal and the creation of efficient, economical treatment facilities are the two competing interests that must be balanced to resolve the controversy and to lessen the burden for communities like Western New York. The capacity assurance requirement provides the best mechanism to accomplish this goal; however, the present provision does not adequately address equity concerns. Statutory or regulatory reform which requires capacity at a regional level provides for equitable distribution of the costs associated with hazardous waste facilities and for safe, economical and efficient hazardous waste treatment facilities.

213. See GREEN, *supra* note 3, at 96.

