5-1-1986

Negotiation and Mediation: The Newest Approach to Hazardous Waste Facility Siting

Bernd Holznagel

Follow this and additional works at: http://lawdigitalcommons.bc.edu/ealr

Part of the Dispute Resolution and Arbitration Commons, and the Environmental Law Commons

Recommended Citation


This Article is brought to you for free and open access by the Law Journals at Digital Commons @ Boston College Law School. It has been accepted for inclusion in Boston College Environmental Affairs Law Review by an authorized editor of Digital Commons @ Boston College Law School. For more information, please contact nick.szydlowski@bc.edu.
NEGOTIATION AND MEDIATION: THE NEWEST APPROACH TO HAZARDOUS WASTE FACILITY SITING

Bernd Holznagel*

INTRODUCTION

In the United States there is increasing interest in the use of arbitration and mediation as an alternative to the adjudication of disputes.¹ Time consuming and costly court procedures are incentives to search for consensual dispute resolution methods. In public sector disputes, adjudicatory administrative procedures often lead to costly delays or, in the case of the siting of hazardous waste facilities, often fail to resolve disputes.²

Traditionally, mediation has been used to resolve collective bargaining disputes.³ Divorce mediation⁴ and neighborhood mediation⁵ have also been used on an increasingly regular basis. The list of instances in which mediation has proved successful in public resource allocation disputes is growing steadily.⁶ Consensual approaches to resolving environmental disputes have now been used for a decade.⁷ At first, mediators were employed on a case-by-case basis to resolve disputes involving the siting of flood control dams, highways, public parks, and transportation terminals.⁸ Recently, several federal agencies, including the Environmental Protection Agency (EPA), have experimented with mediation and negotiation in the administrative

---

¹ See infra notes 2–10 and accompanying text.
⁷ BINGHAM, supra note 6.
rule-making process. Statutes in Massachusetts, Rhode Island, Wisconsin, and Connecticut authorize, or even require, negotiation and mediation of waste facility siting disputes. While the techniques used in environmental mediation extend far beyond the methods employed for mediation in the private sector, however, mediation should be viewed as a supplement to, rather than a replacement for, traditional adjudicatory procedures.

This article discusses the role of mediation and negotiation of hazardous waste facility siting procedures. The first section of the article introduces the political and legal framework governing hazardous waste facility siting decisions. This section concludes that the major obstacle to the siting of hazardous waste facilities is public opposition, and that such siting decisions are particularly influenced by public opposition because they are made at the state and not the federal level of government. The second section of the article discusses state facility siting techniques that provide no role for negotiation or arbitration. These “non-negotiative” techniques typically include the state preemption of local authority. The third section of the article discusses state siting techniques that do provide a role for negotiation or arbitration, specifically the Massachusetts Hazardous Waste Facility Siting Act. The fourth and final section compares the Massachusetts statute with those enacted in Rhode Island, Wisconsin and Connecticut, and describes the theoretical advantages and disadvantages of each.

I. THE DILEMMA OF HAZARDOUS WASTE FACILITY SITING

The United States, like all industrial nations, produces huge amounts of waste every year. In 1978, 130 million metric tons of municipal waste, 5 million metric tons (dry weight) of sewage sludge, 430 million metric tons (dry weight) of agricultural wastes, over 3 billion tons of mining wastes, and approximately 344 million metric tons of industrial wastes were generated in the United States.12

10 Bingham & Miller, supra note 2, at 473–78.
11 Unless indicated otherwise, the figures given are wet weight.
Not all types of waste, however, pose the same problems for public health and the environment. In the case of hazardous waste, special treatment and disposal is necessary because of its potential harm to the environment, and to public health and safety. The Resource Conservation and Recovery Act of 1976 (RCRA),\textsuperscript{13} which is the federal regulatory program for solid and hazardous wastes, defines the term hazardous waste as a solid waste that may pose a significant threat to human health or the environment when improperly managed.\textsuperscript{14} In general, hazardous waste enters the environment through one or more of six major pathways,\textsuperscript{15} the most prevalent and menacing of which is contamination of groundwater by leachate.\textsuperscript{16} Furthermore, groundwater contamination is difficult to detect and can remain for decades.\textsuperscript{17}

Available estimates concerning the quantity of hazardous waste produced annually vary widely. In 1980 the EPA released a study estimating that the volume of hazardous waste generated annually was between 27.4 and 53.9 million metric tons.\textsuperscript{18} In later studies, the EPA estimates that approximately 760,000 generators produce between 50 to 60 million metric tons of hazardous waste annually.\textsuperscript{19}


\textsuperscript{14} Id. § 6903(5). The term solid waste means "any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities . . . ." Id. § 6903 (27); 40 C.F.R. § 216.2 (1983).


\textsuperscript{19} EPA Annual Rep., supra note 12, at 1. An EPA consultant reported that 14,100
The annual rate of increase in the amount of hazardous waste produced is estimated by the EPA to be between three and four percent.\textsuperscript{20} The chemical and allied products industries is the largest generator of hazardous waste; it generates sixty-two percent of the annual total. Other major sources include the primary metal industry contributing ten percent, and the fabricated metal products industry contributing five percent.\textsuperscript{21} Approximately fifteen percent of these wastes have been disposed off-site and seventy-five percent on-site.\textsuperscript{22}

The greatest amount of hazardous wastes is produced in states with large industrial sectors: New Jersey (3.1%), Texas (3.0%), California (2.6%), Ohio (2.6%), Pennsylvania (2.6%), Illinois (2.5%), New York (2.3%), Michigan (2.0%), Tennessee (1.3%), and North Carolina (1.3%).\textsuperscript{23}

Before the enactment of RCRA in 1976, most state solid waste statutes addressed exclusively the planning and management of solid waste disposal and sanitary landfills, and omitted provisions for hazardous waste control.\textsuperscript{24} Before 1976, only California, Illinois, Maryland, Minnesota, Oklahoma, Oregon, and Washington had enacted comprehensive hazardous waste management legislation.\textsuperscript{25} At the time RCRA was enacted, half of all states assigned no more than one or two persons to work on hazardous waste issues.\textsuperscript{26} This inadequate or nonexistent regulatory control of hazardous waste was one


\textsuperscript{20} EPA, SOLID WASTE FACTS: A STATISTICAL HANDBOOK 2 (1978) [hereinafter cited as EPA STATISTICAL HANDBOOK]. The annual rate of increase for all waste is estimated at 8%. Legislative History, supra note 12, at 6239.

\textsuperscript{21} BOOZ-ALLEN, supra note 18, at 4.

\textsuperscript{22} On-site means on the same property where the waste was generated. Id. See also GREENBERG & ANDERSON, supra note 12, at 8.

\textsuperscript{23} See GREENBERG & ANDERSON, supra note 12, at 14.

\textsuperscript{24} The development of solid waste management began in the 1960s. Before this period, the states regulated refuse disposal only. The regulation of hazardous waste that did exist was thus largely a matter of broad, and sometimes incorrect, interpretation of state solid waste statutes. Wolf, supra note 17, at 471 n.36.

\textsuperscript{25} Legislative History, supra note 12, at 6261.

\textsuperscript{26} Id. at 6242. It is noted that: EPA has been able to identify approximately 50 people in 25 states as working primarily or exclusively on hazardous waste management. Some of these have been employed to work on specific tasks (usually state hazardous waste surveys) and do not make active contributions to other aspects of the state’s program. Approximately
reason for the "near universal mismanagement" of hazardous waste disposal. The EPA estimates that before 1976 almost half of all hazardous wastes were placed in unlined surface impoundments or lagoons. Another thirty percent were buried along with a host of nonhazardous wastes in ordinary landfills or stored above ground in barrels. Ten percent was disposed of by uncontrolled incineration, without adequate measures taken to prevent the release of hazardous emission into the air. The balance of hazardous waste was disposed of by a variety of illicit methods such as midnight dumping along rural roadsides, or illegal dumping into municipal sewers and creeks. Congressional drafters of RCRA described the situation as follows:

The available data about improper disposal of hazardous wastes vary immensely. Widely quoted estimates by the EPA and its consultants, published in 1978, state that between 32,000 and 50,000 active or inactive disposal sites contain hazardous waste, and that up to 2000 of these sites pose a significant risk of imminent hazard to the public. Furthermore, the EPA estimated in 1978 that ninety percent of the hazardous wastes generated before the enactment of RCRA have been treated or disposed in an environmentally unsuit-
able manner that jeopardizes human health and natural systems. Estimates published in 1983, however, show that approximately 16,000 inactive sites are thought to contain hazardous wastes, of which 546 are on EPA's list of so-called "priority sites".

Clearly, these improperly managed hazardous waste sites are "ticking time bomb[s] primed to go off," and threaten to cause tremendous harm to public health, the environment and even to the political system itself. Several hazardous waste catastrophes have already occurred, the best known example of which is synonymous with improper hazardous waste disposal in the United States: the 1978 Love Canal case.

Congress reacted to this state of mismanagement by enacting the Resource Conservation and Recovery Act of 1976 (RCRA), and the Comprehensive Response, Compensation and Liability Act of 1980 (CERCLA). RCRA was the first federal regulatory program aimed at control of solid and hazardous wastes. CERCLA contains requirements for the investigation of hazardous waste disposal sites and practices, and outlines a national plan for remedying actual or threatened releases of hazardous wastes.

After the enactment of RCRA and CERCLA, there was an increasing demand for the construction of state-of-the-art hazardous waste facilities. The most important change concerning the siting of new facilities is the shift away from the use of on-site to the use

---

36 EPA Statistical Handbook, supra note 20, at 4; Canter, supra note 16, at 423.
37 See Greenberg & Anderson, supra note 12, at 108, 123.
38 Legislative History, supra note 12, at 6254-61. It is surprising that research on the health effects of human exposure to hazardous waste is not sophisticated. See Greenberg & Anderson, supra note 12, at 84-105.
39 A chemical company used the Love Canal landfill site as a waste dump from 1942 to 1953. After the property was sold, a school and houses were built on the site and in the surrounding area. In 1976, large amounts of hazardous waste began to leak from the site. Fumes and leachate began seeping into the basements of homes and rising to the surface of yards and children's play areas. In August 1978, President Carter declared a state of emergency in the area. Approximately 1,000 families were evacuated; cleanup and relocation costs have thus far exceeded $30 million. The N.Y. State Health Dept. asserts that contamination at the site has caused an increased incidence of spontaneous abortions, birth defects, and serious illness in the area. The cancer rate in the vicinity is 30 times the national average. See M. Brown, Laying Waste: The Poisoning of America by Toxic Chemicals 1-54 (1979).
41 42 U.S.C. § 9601 (1982). The Act is popularly called Superfund because it creates a fund to finance clean-up and other government actions to eliminate imminently dangerous conditions.
42 For a general discussion, see Greenberg & Anderson, supra note 12, at 169-75; Booz-Allen, supra note 18, at II, III.
43 Id. at X-1-X-6; Wolf, supra note 17, at 768.
of off-site facilities. Several factors are responsible for this development. First, RCRA's broader definition of hazardous waste, and the additional accumulation of hazardous waste resulting from removal efforts initiated under the CERCLA, increases the sheer amount of hazardous waste which must be treated and disposed. Second, since the implementation of the Clean Air Act Amendments and the Clean Water Act, industries' use of pollution control devices extracts greater amounts of hazardous waste from their manufacturing processes. Third, RCRA reduced the cost advantages for on-site disposal. Before RCRA, on-site facilities were almost entirely exempt from state and local permit requirements. When the number of regulatory requirements increased, it became cheaper for generators to share the costs of off-site disposal rather to build their own hazardous waste facilities.

The Massachusetts Department of Environmental Management (DEM) estimates that in Massachusetts, 190,000 to 240,000 tons per year of hazardous wastes require off-site treatment and disposal. Massachusetts hazardous waste generators ship more than sixty percent of all hazardous waste to Connecticut (which receives 33%), New York (which receives 5.6%), New Jersey (which receives 5.6%), Alabama (which receives 3.6%), and Rhode Island (which receives 3.5%). High transportation costs combined with the possibility of major lawsuits associated with the increased risk of accidents en route to out-of-state facilities are the necessary consequences of such a situation. Furthermore, states are increasingly resistant to receiving hazardous waste imports. This attitude will be reinforced as state-owned facilities, especially landfill sites, fill to capacity. New

---

46 Canter, supra note 16, at 426.
47 Booz-Allen, supra note 18, at VIII-1–X-9. In 1980, 9.7 million metric tons were treated or disposed of in 127 sites. These 127 facilities were operated by 89 private firms and 4 public agencies. The hazardous waste industry is highly concentrated: the largest 4 national firms account for approximately 45% of industry revenues. The 1981 capacity for hazardous waste management is estimated to be over 18.4 million metric tons. However, there is a significant mismatch between supply and demand. For example, EPA Region VI has almost 44% of the national off-site capacity, whereas EPA Region VIII has no capacity at all. The study estimates that there is a total shortfall of 1.4 million metric tons in 5 of 10 EPA regions.
49 Id. at 3–11.
50 Interview with Joan Gardner, Executive Officer, Massachusetts Hazardous Waste Facility Site Safety Council (July 15, 1985).
hazardous waste disposal facilities are, therefore, increasingly necessary in Massachusetts.51

In spite of the high demand for hazardous waste facilities, a 1984 report by the Massachusetts Hazardous Waste Facility Site Safety Council (HWFFSC) shows that, pursuant to new state hazardous waste siting statutes, only eight facilities have been approved for operation in the United States. As of 1984, there have been thirty-two siting attempts: eighteen failed, three were still in court, three were in the process of approval, and only eight were approved.52 Remarkably, it is not now known exactly how many of the approved facilities are actually in operation.53 Explaining the failure or delay of siting attempts is not always easy; the one factor common to most of them is extensive public opposition.54 It has been argued that public opposition is the greatest, or the only, obstacle in implementing the entire hazardous waste management program under RCRA.55

What is described as public opposition to siting attempts in the United States is not the same as the public opposition by environmentalists trying to halt siting attempts in Europe. In Europe, both the governmental decision-making and the environmental movement itself are more centralized than in the United States. Public opposition in the United States is found mainly among local residents, their elected officials, and state politicians who have a local political constituency.56 In Europe, specifically in West Germany, resistance

52 Interview with Joan Gardner, Executive Director, Massachusetts Hazardous Waste Facility Site Safety Council (July 11, 1985).
54 See EPA SITING, supra note 53, at III. See also Wolf, supra note 17, at 482 n.76. Wolf points out that public opposition cannot be singled out as a major obstacle to the implementation of the RCRA program:
[t]he real impediment to effective hazardous waste control is the absence in national hazardous waste policy of a strategy that places paramount emphasis on the reduction of hazardous waste at its source which is coupled with the stringent disposal regulation promised by Subtitle C. There is additional justification for citizen opposition due to the past, present and future underfunding of regulatory programs which make them inadequate to protect public health and the environment from serious hazardous waste pollution.
Id. at 540.
to siting decisions is organized by nationwide environmental groups, or even national political parties like the Greens. It is difficult thus to address public opposition in the United States by national legislation. State legislation is therefore a more appropriate vehicle for dealing with this problem.

Ever since the phenomenon of local opposition was observed during attempts to site power plants, airports, or prisons, acronyms such as LULU's (locally unwanted land uses)\textsuperscript{57} and NIMBY (not in my backyard)\textsuperscript{58} were coined to describe the situation. Indeed, investigations have shown that a majority of people recognize the need for new hazardous waste facilities; on the other hand, they do not want one located within one hundred miles of their homes.\textsuperscript{59} A recent study on citizen attitudes towards these facilities in five Massachusetts communities shows that the percentage of residents who would oppose the siting of a facility increases approximately twenty percent if the facility is to be built in the local community rather than elsewhere in the state.\textsuperscript{60}

Opponents of hazardous waste facilities adopt a wide range of tactics to delay or to stop siting attempts; their common tactics include vocal participation during public hearings and the initiation of law suits.\textsuperscript{61} Although the use of these methods may not stop the project, costs of its implementation may be increased. Sometimes the costs of delay are sufficient to defeat the whole proposal.\textsuperscript{62} Another method of influencing the implementation of a developer's plan is to persuade landowners to refuse to sell land in the potential site area.\textsuperscript{63} In addition, local residents often organize public meetings, media events or referenda to express their unified resistance. In some cases citizens have used illegal means, including violence, to block the building of facilities.\textsuperscript{64}

\textsuperscript{57} See, e.g., O'Hare, Not on My Block, You Don't—Facility Siting and the Importance of Compensation, 25 PUB. POL'Y 407 (1977).
\textsuperscript{58} See NAT'L GOVERNOR'S ASS'N, supra note 53, at 2.
\textsuperscript{61} EPA SITING, supra note 53, at 14.
\textsuperscript{62} See Duffy, supra note 15, at 795 n.281.
\textsuperscript{63} EPA SITING, supra note 53, at III–IV.
Municipal officials may exercise the local police power to influence siting attempts. The scope of this power varies from state to state and is determined by the home rule provisions of the state law. The United States Constitution provides no explicit right of self-government for municipalities. Municipal powers are defined in state constitutions. The tenth amendment to the United States Constitution provides that the "powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people." In an interpretation of the tenth amendment, the Court in City of Trenton v. State of New Jersey, held that, in the absence of state constitutional provisions establishing independent rights, municipalities are mere departments of the states, and that therefore states may grant or withdraw privileges and powers as they see fit. To protect some municipal rights, many states have enacted home rule amendments to the state constitution. Massachusetts, for example, adopted a home rule amendment in 1966:

[any city or town may, by the adoption . . . of local ordinances or by-laws, exercise any power or function which the general court has power to confer upon it, which is not inconsistent with the constitution or laws enacted by the general court in conformity with powers reserved to it . . . and which is not denied . . . to the city or town by its charter."

Home rule in Massachusetts therefore includes land use power as well as the power to control public health, safety, morals, and general welfare of the municipality.

In order to block the siting of hazardous waste facilities, municipalities often zone their land so that such facilities are prohibited from locating within their boundaries. Often ordinances prohibit or restrict the construction and operation of hazardous waste facilities by imposing new public health or safety permit requirements, or by

65 U.S. CONST. amend. x.
67 See Provost, supra note 64, at 739–40 ("Home rule amendments take a variety of forms and create differing degrees of autonomy.").
68 MASS. GEN. LAWS ANN. ch. 43B, § 13 (West 1968). The General Court retains "the power to act in relation to the cities and towns but only by general laws which apply alike . . ., or to a class of not fewer than two . . .." Mass. Const. Amend. Art 2, § 8 (1978).
issuing restrictions on the transportation of waste to the facility.\textsuperscript{71} Furthermore, local governments and politicians often use their political power to influence the state government to defeat a siting attempt. In a case study of four recent siting attempts in the United States and Canada,\textsuperscript{72} it was noted that the efforts of local residents and elected officials alone are usually insufficient to defeat a proposal. The additional support of influential policy makers at the state level is necessary. Influence on the state level is especially important if the project becomes an election issue.\textsuperscript{73}

The dominant reason for local opposition is the fear of the major and long-term health and welfare risks posed by the facility to residents in the surrounding areas.\textsuperscript{74} Studies show that concern about safety issues is the major component of public reaction.\textsuperscript{75} It is generally recognized that such fear is primarily the result of growing public recognition of hazardous waste mismanagement.\textsuperscript{76} Public concern reflects the diminishing of citizen confidence in governments’ capacity to properly handle the hazardous waste problem.\textsuperscript{77}

Communities envision few benefits from proposed facilities. A hazardous waste facility’s economic impact on the community is one indicator of its relative advantages and disadvantages. These facili-
ties usually create few jobs and produce little additional tax revenue. On the other hand, one can predict that property values will fall, thereby reducing the community's tax base and limiting residents' ability to sell their homes at previous market values. The stigma of being the region's dumping ground may also have a negative effect on the local business community.78 Residents are not only concerned with economic factors: the facilities are also opposed because they might be a nuisance. Residents expect odors, noise and increased traffic on local roads.79

The fifth and final major reason for local opposition to new facilities is based in equity. Residents near the potential site question the fairness of burdening their community with a large share of the risks associated with hazardous wastes while others receive the benefits of reduced midnight dumping, decreased transport distances for hazardous waste disposal, and an increased capacity to serve the industrial activities which produce hazardous waste.80 Residents of rural areas have been especially unwilling to accept wastes generated by urban industries.81 Interestingly, urban residents may be more likely to accept the risk and dangers associated with the construction of a facility.82

When Congress enacted RCRA, it created the first federal regulatory program for the systematic control of hazardous wastes.83 To implement RCRA, the EPA issued several sets of regulations.84 The EPA considers these regulations to be the "most complex" regulations ever promulgated by the EPA.85

The most important amendments to RCRA were passed in 1984,86 and were designed to close gaps in the original regulatory system.

---

78 EPA SITING, supra note 53, at IV, 12--3. See also Bacow & Milkey, supra note 60, at 268.
79 EPA SITING, supra note 53, at IV.
80 Id. at 13. Bacow & Milkey, supra note 60, at 268. See also Morell & Magorian, supra note 55, at 41.
81 EPA SITING, supra note 53, at IV.
82 Portney, supra note 59, at 53; Ristoratore, supra note 72, at 22. One commentator argues that the use of areas at the periphery of industrial regions, located downstream from the large population centers, minimizes the potential of public opposition: "[C]ommunities that are in the process of industrialization are more likely to be interested in a waste disposal plant than congested and probably polluted industrial towns or communities that prefer to conserve their rural character." Id.
83 For a general description of the legislative history of RCRA, see Schnapf, State Hazardous Waste Programs Under the Federal Resource Conservation and Recovery Act, 12 ENVTL. L. 679, 689 (1982). See also Wolf, supra note 17, at 463 n.2.
85 C. Beck, Assistant Administrator for Solid Waste, EPA, in 11 ENV'T REP. (BNA) (CURR. DEV.) 35 (May 9, 1980).
First, the exemptions for small generators, those producing 1,000 kilogram per month or less, were abolished.87 Second, the requirements for landfill and underground injection were made more stringent.88 Finally, the definition of hazardous waste was broadened.89

RCRA and its amendments establish a "cradle to grave system" to regulate hazardous waste from the time of generation to the time of disposal. RCRA establishes a monitoring system, combined with management standards and sanctions for offenders.90 In general, this approach to regulation of hazardous waste consists of five major elements: identification and listing of hazardous waste;91 a manifest system for tracing the life cycle of hazardous waste from its generation to its final disposal;92 minimum standards for hazardous waste treatment, storage and disposal;93 requirements for state implementation of hazardous waste management;94 and an enforcement program.95

91 42 U.S.C. § 6921 (1982). The starting point of the hazardous waste management system is the identification and listing of such wastes. The regulations promulgated pursuant to RCRA set forth the substances that are deemed to be solid and hazardous wastes. 40 C.F.R. § 261 (1983). Hazardous waste can be identified by inclusion on a list of hazardous substances, 40 C.F.R. § 261.30-.33 (1983); and by an analysis of their characteristics, 40 C.F.R. § 261.20-.24 (1983). In practice, listing remains the most common method of identifying hazardous waste. When substances are not listed, or when waste is a mix of components, a test performed by the generator is required.

The RCRA regulations outline four waste characteristics: 1) ignitability — ability to cause fire or exacerbate fire once it is started; 2) corrosivity — ability to corrode standard containers; 3) reactivity — instability and a tendency to explode or react violently; and 4) extraction procedure toxicity — the presence of certain toxic materials at levels beyond those permitted in the regulations. 40 C.F.R. § 261.21–22, 261.24 (1983).
94 42 U.S.C. § 6926 (1982). Following the statutory pattern established by the Clean Air Act and the Clean Water Act, RCRA represents a rejection of a wholly federal system, and instead provides for a federal-state partnership. The EPA sets national minimum standards; however, states are permitted to administer their own programs if the programs comply with the federal requirements and are approved by the EPA. 42 U.S.C. § 6926 (1982). Voluntary state participation avoids tenth amendment problems that would result from a strict federal approach. See Schnapf, supra note 83, at 694 n.76; Comment, RCRA’s State Program Pro-
Although RCRA regulates the technical suitability of a proposed site, it does not regulate whether, or where, hazardous waste facilities should be built. RCRA does not address these issues; thus the siting of facilities is left to the states. The role of the EPA is limited to the provision of assistance to states, which includes: organization of an information exchange; development and dissemination of handbooks regarding public participation, the use of mediators, and the identification of risks; and of monitoring the progress of siting programs.

The EPA’s advice to state siting planners is guided by three principles: environmental and social effects must be analyzed prior to site selection; public participation at an early stage of the process is a prerequisite for successful site selection; and siting attempts should not be restricted by blanket local vetoes.

There are a number of important reasons for this state-federal partnership policy. The drafters were convinced that the states could more easily tailor programs to local needs because states are more familiar with their local citizens. Similarly, the public participation and education process is more likely to succeed when states administer the siting programs. Finally, states possess the broad eminent domain authority that is desirable for effective site selection.

The states, however, have only partially accepted this congressionally designated role as promoter of hazardous waste facility siting programs. In fact, a survey of the National Conference of State
Legislatures published in 1982 shows that twenty-seven states chose to enact their own hazardous waste facility siting statutes. 102

II. NON-NEGOTIATIVE FACILITY SITING TECHNIQUES

This section of the article explores how new state siting statutes address the problem of public opposition. 103 In general, there are two possible approaches: 1) diffuse opposition by providing for local citizen participation; and 2) provide for state preemption of local authority. 104 Some states have attempted to introduce negotiating procedures as a way to diffuse public opposition. Massachusetts is the classic example of such a state; it included an elaborate negotiating procedure in its siting statute. The Massachusetts approach therefore will be examined in detail and then compared to the legislative schemes in Rhode Island, Connecticut, and Wisconsin. There are two assumptions underlying the following discussion of facility siting issues: 1) the site selected is the “technical best” site; and 2) a facility that complies with local public health and safety requirements is feasible.

A. Citizen Participation

State statutes provide for four primary vehicles of citizen participation: representation on state facility siting boards; formation of local advisory committees; public hearings; and participation in the site designation process. In most cases, the only possibility for local participation at the state level is the host community’s representation on the state facility siting board. 105 However, not all states with special siting provisions have such a siting board, 106 and not all boards provide representation for members from the local community. 107 In some states, the function of the siting board is performed

102 Id.
103 Wolf, supra note 17, at 507 n.208. Some commentators, however, suggest that “the claims of flexibility and responsiveness made about state programs are euphemisms for favoritism toward industry.” Id. at 507 n.209.
104 Id.
instead by the regulatory agencies that implement the RCRA hazardous waste management program.

The authority of state siting boards varies considerably, their primary function, however, is to review siting proposals and to issue permits where appropriate. Some boards are also involved in site planning. In order to fulfill these functions, the board is usually composed of administrators of state agencies and appointees selected on a statewide basis. Appointees are often selected to represent a variety of professions and interest groups. Experts in such scientific disciplines as chemical engineering, hydrology or biology are commonly required. Local representation is always limited to participation by advocates of a specific proposal and the local representatives never have the majority of votes. The sitting boards range in size from a five member board to a twenty-one member board. Siting boards thus serve the dual purpose of providing technical and administrative experts to improve and legitimize site evaluation and selection, and of providing host communities with the opportunity to influence and improve site selection.

While most of the states limit local representation in the siting procedure to temporary positions on the state sitting boards, some states provide for local representative bodies, called “local project review committees” or “local assessment committees.” Minnesota’s local project review committee is a typical example. Its members are appointed by the Governor to represent each location selected as a candidate site. The Governor is required to ensure balanced representation of all parties with a legitimate and direct interest in the siting decision. Abutting communities, however, have no right to participate in this process.

Pursuant to the Minnesota statute, a committee is charged with several responsibilities: to provide information about the proposed

---


facility; to solicit, record and communicate local attitudes and concerns to government agencies; and to act as an intermediary between interested parties. Technical assistance grants are provided to make the committee’s work possible. Although in Minnesota the local project review committee has no formal mandate to negotiate with the developer, it often functions in that role since it is the mechanism for communication among the community, the state, and the developer.

It is generally recognized that a state’s failure to disclose relevant facts to citizens of the proposed host community, and exclusion of the community from the decision making process, increases public distrust and opposition. For this reason, RCRA, and the EPA’s regulations, provide for a minimum of public participation by requiring a public hearing. In general, state statutes limit public participation to this statutorily required hearing, but notice and hearing requirements differ from state to state.

The issue of proper notice is a significant aspect of the administrative hearing process. In some states the government agencies must send notices to the landowners who live within a specific radius of a proposed facility; other states require that the chief local elected official be informed about the project, who then must inform local residents. Another method of informing those most likely to be affected is to publish a notice in a newspaper with major circulation. Usually, at least one hearing is held in the host community after the notification, but before the issuance of a license. In

---


113 MINN. STAT. ANN. § 115A.22 (3) (West Supp. 1986). The local committee selects a temporary member for the Waste Management Board.


Georgia, however, a governmental subdivision, an association of at least twenty-five members, or twenty-five citizens of the proposed host community must make a request before a public hearing will be scheduled.\footnote{Ga. Code Ann. § 12-8-66(n) (Supp. 1985).}

The second important distinction among state statutes lies in the type of hearing required and the procedural rules to be applied. There are two main types of hearings: adjudicatory and legislative.\footnote{See Harrington, supra note 70, at 223; M. O'Hare, L. Bacow & D. Sanderson, supra note 2, at 41–43 (1983).} The adjudicatory, or “trial-type” hearings, employ strict adversarial rules of procedure. During the hearing, the parties may call and examine witnesses and submit other evidence respecting the disputed issue. Cross-examination is permitted and the state rules of evidence apply. The informal or “legislative-type” hearings are held for the purpose of receiving written or oral comments concerning location and operational requirements of a hazardous waste disposal facility. These hearings are typically held without strict procedural rules and interested persons are granted the opportunity to express their views.

Both types of public hearings are criticized because they are often perceived to be more of a ritual than an effective means of citizen involvement. Moreover, they are often held too late in the decision-making process to make any real difference. Scholars who favor consensual decision-making point out that the exclusive use of adversarial hearings as mechanisms of public participation in licensing procedures creates a litigious process that does not encourage the parties to cooperate.\footnote{See Popper, An Administrative Law Perspective on Consensual Decisionmaking, 35 Ad. L. Rev. 255 (1983); Boyer, Alternatives to Administrative Trial-Type Hearings for Resolving Complex Scientific, Economic, and Social Issues, 71 Mich. L. Rev. 111 (1972); Harter, supra note 9; O'Hare, Bacow & Sanderson, supra note 2, at 42.} Formal, trial-type procedures govern communication among the parties to adversarial hearings, and often local citizens are not given the opportunity to address general concerns or to engage in constructive communication with the developer. This adversarial environment creates hostility and leads almost automatically to the rejection of each party’s proposals. Furthermore, the parties are represented by lawyers who are trained in adversarial procedures and who often use these hearings as a method of building a record for court, rather than as a tool for citizen participation and dispute resolution.
Usually, citizen participation begins during the permit process, *after* site selection has been completed. To avoid this situation, some states have adopted the "site designation approach." Using this approach, it is the state agency, not the developer, who initiates the siting process and designates preferred sites around the state for the construction of future facilities. The site designation approach is not so much a specific method of citizen participation, but rather a method that rearranges the timing of citizen participation. In general, the task of finding a location for a facility is left to the developer. The state's role is confined to reviewing proposals to verify their compliance with general standards and to issue the necessary permits and licenses.

Arizona has opted for an unusual variation on the site designation theme by statutorily designating candidate sites. In Maryland, on the other hand, counties, incorporated municipalities, and the City of Baltimore are all required to submit lists of candidate sites within their jurisdiction. In Maryland, if a local governing body cannot agree upon a specific site, then the state agency selects the site for inclusion in the inventory. The state agency also evaluates the site inventory. The Maryland statute, however, does not require that developers choose one of the sites designated in the inventory.

The Minnesota statute provides that six locations must be designated as candidate sites for commercial disposal facilities. The site selection procedure commences when the state's Waste Management Board issues a statewide solicitation for proposals and permit applications from potential developers. After the Board publishes the proposals, all agencies concerned, the local government, and the local residents may file objections. The Board then makes the final choice of the candidate site.

---


125 The Waste Management Board consists of nine permanent members which were appointed by the governor. This agency is responsible for the implementation of Minnesota's Hazardous Waste Management Program. *Minn. Stat. Ann.* §§ 115 A.05, 115 A.06 (1982).

126 *Minn. Stat. Ann.* § 115A.21 (West Supp. 1986). The regional commissions, the metropolitan council and the local government may make the objections during a formal hearing process. *Id.* § 115A.21(2). Local residents may influence the project through participation on
Besides making public participation possible at an early stage in the site selection process, there are other advantages of the site designation approach. Public control over location decisions allows for the incorporation of social, political, economic, and technical site criteria which would not be relevant to a private site selection. The fact that states offer better means for site identification is also a tool to gain public support. On the other hand, where the site designation model is used, states bear the costs associated with location decisions that otherwise would be absorbed by the private developer.

B. State Government Preemption of Local Authority

In the past, local communities could block all siting attempts through the exercise of their police powers. Such local tactics included the enactment of zoning by-laws, ordinances to prohibit hazardous waste facilities, and the limitation or prohibition of the transportation of hazardous waste. As a consequence, most statutes provide for state preemption authority.

1. Preemption of Land Use Power

Local zoning by-laws and ordinances are widely used to block the siting of hazardous waste facilities. The inclusion of blanket override provisions in a state siting statute is, theoretically, a simple method to avoid this obstacle. In Maryland, for example, the construction of a hazardous waste facility is exempt from any local regulation once the state issues a certificate of public necessity. In Illinois, the statute provides that local zoning and other land use by-laws are

the “local project review committees.” Id. § 115A.22. Moreover, a hazardous waste management council and an interagency technical advisory council are allowed to make further recommendations. Id. § 115A.12.

127 See Hadden, Veilette & Brandt, supra note 120, at 202; Wolf, supra note 17, at 486.

128 Wolf, supra note 17, at 486. One Minnesota demonstration project designed to identify suitable state sites for landfills failed due to local opposition. The project has been dissolved, and the project money returned to EPA.

129 See Duffy, supra note 15, at 789–98. There are, however, some states that authorize the local communities to make the final decision. The California facility siting statute, for example, provides that no section of the statute limits the authority of a state or local agency to enforce or administer any provision of law that it is specifically permitted or required to enforce and administer. CAL. HEALTH & SAFETY CODE ANN. § 25147 (West 1984).


not applicable. Other statutes follow a so-called “simultaneous consideration” approach. The Connecticut statute, for example, provides for the hazardous waste council to oversee the siting process, but also permits consideration of local laws, ordinances, and regulations “as it shall deem appropriate.” Florida uses a different approach to override local land use power. The modification of local zoning by-laws or ordinances may be permitted by decision of both the governor and the governor’s cabinet. New York uses still another preemption process: its statute allows an override of only those land restrictions that were promulgated after the date of the proposed facility’s permit application.

Since federal and state lands are excluded from the jurisdiction of local police power authority, a state’s use of its eminent domain authority is another alternative used to override local land use restrictions. Usually the power of eminent domain is only used to obtain land for the site. Later, the land is leased or sold by the state to the facility operator. Once the land is sold to a private person, however, the community can once again use its zoning power in order to block the siting process.

Siting statutes that incorporate eminent domain power do so in a variety of ways. In Arizona, the director of the Department of Health Services may obtain lands for siting by “condemnation.” In Minnesota, the state siting board may direct the Commissioner of Health to acquire the siting area by eminent domain. Permanent state ownership of the site is advantageous because, after closure of the facility, the site is still under governmental control. See Farkas, Overcoming Public Opposition to Establishment of New Hazardous Waste Disposal Sites, 9 CAP. U.L. REV. 451 (1980). Hadden, Veilette & Brandt, supra note 120, at 202.

134 CONN. GEN. STAT. ANN. § 22a–124 (West Supp. 1985). Refusal of a local permit by the host community may therefore be appealed to the hazardous waste council. The council may affirm, modify or revoke the decision of the local community, and may substitute its own decision.
137 “Eminent domain is the power to take property for a public or semipublic use. This power is an inherent right of sovereignty of a municipality, a state, or a nation and may be conferred on non-sovereign entities by legislation.” Duffy, supra note 15, at 796 n.282.
138 Permanent state ownership of the site is advantageous because, after closure of the facility, the site is still under governmental control. See Farkas, Overcoming Public Opposition to Establishment of New Hazardous Waste Disposal Sites, 9 CAP. U.L. REV. 451 (1980); Hadden, Veilette & Brandt, supra note 120, at 202.
of Administration to acquire the necessary site.141 In New Jersey, the state’s hazardous waste commission may acquire by eminent domain any land “reasonably necessary” for a hazardous waste facility.142

2. State Preemption of Local Hazardous Waste By-Laws

Another method used by communities to block the siting process is to enact restrictions or prohibitions on construction.143 Most state statutes therefore include a prohibition on the enaction of such local by-laws.144 In Indiana, for example, no community may “prohibit or unduly restrict . . . the treatment, storage or disposal of hazardous waste at a facility.”145 The Kansas statute rules out by-laws that prohibit the construction or modification of a hazardous waste facility by “ordinance, permit requirement or other requirement.”146 The Maryland statute exempts the proposed facility from all local requirements once the certificate of public necessity has been issued.147 Maine has opted for a more problematic approach: it allows such by-laws, but only to the extent that they are less stringent than the state standards.148

Some communities restrict road use, and impose weight limits on roads that would otherwise be used by hazardous waste transporters. Several states have legislated against these techniques.149 The Kansas statute disallows local ordinances that “restrict transportation to the facility.”150 Pursuant to the Maryland statute, the issuance of a certificate of public necessity exempts from local regulation “the transportation of hazardous . . . waste to and from the facilities on the site.”151

States balance state and local interests differently. Where there is a strict state preemption approach, which provides for no adequate

---

mechanisms for citizen participation, the state may ignore local concern and impose needed facilities on selected communities. At the other end of the spectrum, some states permit a local veto, or the use of unrestricted police power, both of which may easily be used to block all siting attempts, even when they are necessary and in the public interest.

Some scholars assert that the strict preemption approach is the only workable solution because it is the only formal way to remove all police power obstacles. There are, however, several drawbacks in this method. First, state preemption does not win community support for a site, and indeed simply steamrolls over public opposition. State preemption presumes that local governments are not partners, and therefore are to be viewed as obstructionist. This policy frustrates citizens and intensifies their opposition. Secondly, state preemption addresses only on the symptoms of local opposition, not on its cause. States will never preempt all symptoms of local opposition; at best some of the symptoms are neutralized. In fact, local governments often use political influence power in the state government to defeat or prevent the inclusion of a state preemption clause in the statute. Furthermore, when public channels for the expression of fears and concerns are foreclosed early in the process, opponents may be encouraged to use extralegal means to express their opposition.

Third, preemption clauses in state statutes shift to the judiciary the whole problem of facility siting. Opponents frequently exercise their right to appeal permit, decisions, and even if they ultimately lose their lawsuit, the opponents may nonetheless be able to stop the whole project if the costs of delay are sufficient to frustrate the developer. In any event, these attempts increase the costs for the opponents, as well as for the supporters of siting attempts.

153 Morell, supra note 74; Bacow & Milkey, supra note 60, at 272; D. Morell & C. Magorian, supra note 55; Wolf, supra note 17, at 491; Farkas, supra note 138; Susskind & Cassella, The Dangers of Preemptive Legislation: The Case of LNG Facility Siting in California, 1 ENVTL. IMPACT ASSESSMENT REV. 9 (1980).
154 D. Morell & C. Magorian, supra note 55.
Finally, the state's preemptive authority for hazardous waste siting is rarely used. In states whose statutes provide for such authority, siting attempts are no more successful than in other states. Governors and state agencies are unwilling to overrule community's land use decisions. In states with strong home rule traditions, such as Massachusetts, experts conclude that it is not politically feasible to exercise a preemptive authority. The only workable alternative seems therefore to be a balance between the two extremes of local veto power, and strict state preemption authority.

III. NEGOTIATIVE SITING TECHNIQUES: THE NEW MASSACHUSETTS APPROACH

A. Hazardous Waste Facility Siting in the 1970's

Before enactment of the Massachusetts Hazardous Waste Facility Siting Act of 1980, a facility developer was required to fulfill both state and local licensing requirements. On the state level, the license for handling and disposing hazardous waste was the most important requirement. This license system, introduced in 1973, made Massachusetts one of the first few states to administer its own hazardous waste program. The early regulatory approach relied primarily on city and town boards of health whose three members are appointed by the mayor, subject to confirmation by the city council or board of aldermen. In Massachusetts towns, the board is usually elected, but the town charter or a town meeting may modify the selection process.

Pursuant to this regulatory program, the board of health assigned a site to a developer; before such an assignation, however, a public

---

157 INTERVIEW WITH JOAN GARDNER, EXECUTIVE DIRECTOR, MASSACHUSETTS HAZARDOUS WASTE FACILITY SITE SAFETY COUNCIL (JULY 15, 1985); INTERVIEW WITH LAWRENCE BACOW, PROFESSOR, MASSACHUSETTS INSTITUTE OF TECHNOLOGY (JULY 5, 1985).
159 MASS. GEN. LAWS ANN. ch. 21, §§ 56-58 (1973).
160 See MASS. ADMIN. CODE tit. 310, § 30.00 (1984). The license was issued by the Division of Water Pollution Control, and was subject to such terms as the Division deemed advisable in accordance with the regulations. MASS. GEN. LAWS. ANN. ch. 21 § 57 (West 1981). These regulations defined the term "hazardous waste," and described general requirements for disposal methods.
161 Local boards of health are created by statute. MASS. GEN. LAWS ANN. ch. 111 § 26, ch. 41 § 1 (West 1981).
162 See MASS. GEN. LAWS ANN. ch. 41, § 1 (West 1979). See also CONSERVATION LAW FOUNDATION OF NEW ENGLAND, INC., LEGAL HANDBOOK FOR BOARDS OF HEALTH 4-5 (1982).
hearing was required. The nature of this hearing varied from community to community; the procedural rules were adopted in a by-law or an ordinance. Usually these hearings were informal, and interested persons were given the opportunity to express their concerns and fears about the proposed site. The decision-making criteria for the local board of health were that: "[t]he assignment of a place as a site for a facility shall be subject to such limitation with respect to the extent, character and the nature of operation thereof as may be necessary to protect public health, comfort and convenience." Prior to the assignment of the site, the local board of health could request the advice of the Department of Environmental Quality Engineering (DEQE). In any event, the facility was not to be constructed or operated unless the proposed use and plans had been approved by the DEQE. The revocation, suspension or modification of all licenses was authorized, if, after due notice and a public hearing, the board determined that the facility would result in a nuisance or danger the public health.

The power of the local community — especially of the local board of health — has been described in detail in order to underline the fact that communities possessed nearly unlimited power to block proposed hazardous waste facilities. The community was always free to zone land in a manner that would exclude the facility, and the local board of health had the power to deny an application in order to protect the "comfort and convenience" of a municipality. The former Massachusetts statute thus permitted a single community to block a facility that served a state-wide public interest.

Since hazardous waste facilities bring few benefits to the local residents, and pose significant risks for their health and welfare, such local reactions were common. The statute did not include incentive and compensation mechanisms for the local residents that

163 MASS. GEN. LAWS ANN. ch. 111, § 150 A (West 1983).
164 MASS. GEN. LAWS ANN. ch. 111, § 150 A (West 1983).
165 The DEQE is an administrative unit of the Office of Environmental Affairs. MASS. GEN. LAWS ANN. ch. 21A, §§ 1, 7 (West 1981).
166 See MASS. GEN. LAWS ANN. ch. 111, § 150 A (West 1983); MASS. ADMIN. CODE tit. 310, § 18.00 (1980); MASS. ADMIN. CODE tit. 310, § 19.00 (1971).
167 The board may act on its own initiative, or upon complaint by any person aggrieved by the site assignment, or by the initiative of the DEQE. Any person aggrieved by the board's action may appeal to the DEQE within 60 days of the publication of the site assignment. After due notice and a public hearing, the DEQE may modify or rescind the assignment. The public hearing is an adjudicatory hearing. See MASS. GEN. LAWS ANN. ch. 30A, § 11 (West 1979). The application of the Administrative Procedure Act is not clear from the statutory language. MASS. GEN. LAWS ANN. ch. 111, § 150A (West 1983).
might have facilitated the acceptance of such facilities. Furthermore, abutting communities, who share the burden of costs of any new facility, were not recognized. These communities were therefore more likely to oppose a proposed project. 169

In sum, Massachusetts' former hazardous waste facility siting scheme suffered serious shortcomings. 170 There was no public hearing requirement prior to an announcement of plans for the project. Developers seldom mentioned feasible alternatives when announcing the project, so residents of the affected communities were confronted by an overwhelmingly complex project in whose development they could not participate. Furthermore, statutorily-required information, such as the environmental impact statement, was often issued too late to allow for public comment. 171

It is therefore no wonder that the former Massachusetts siting procedure was criticized as a process lead to conflict and mistrust. 172

B. The New Massachusetts Hazardous Waste Facility Siting Act: Policy Considerations

The Massachusetts Hazardous Waste Facility Siting Act 173 provides for a new approach to hazardous waste facility siting. It is premised on two notions: first, that a strict state overriding authority cannot be used effectively against the declared opposition of the local community; and second, that negotiated compensation paid by the developer to the community for the project's adverse effects serves as an incentive to communities to accept the project.

Community opposition often stops or significantly delays almost any project, regardless of whether the state has preemptive authority. Even where statutes do not provide for state override authority, if local police power remains unrestricted, the result may be the exclusion of inherently unpopular facilities. Therefore, the new Massachusetts statute provides that facilities may be constructed in any area zoned for industrial use. 174 Communities are prohibited from amending their zoning by-laws once a facility proposal has been announced. Furthermore, communities are not allowed to invent new


170 SUSSKIND, supra note 169, at 8–9.

171 Id. at 25.

172 Id. at 25.


local permits after enactment of the new siting statute. 175 Finally, local boards of health are permitted to withhold a site assignment only where it is determined that the facility poses special risks. 176

Limitations on local police power make possible the realization of the second goal of the Act. The Massachusetts legislators concluded that negotiated compensation paid by the developer for the adverse effects of the facility would be an incentive for the host community and abutting communities to accept a proposal. 177 The drafters pointed out that the 

\[\text{n}\text{egotiation of siting agreements will reduce local opposition to proposed facilities . . . because communities are not simply required to say yes or no to a proposed facility. Instead, communities may respond to a proposal including both the facility and a package of incentives and compensation that offsets the local costs of the facility. This package is negotiated directly in response to the community's concern.}\]

The theory underlying this negotiative approach is that the degree to which individual members of a group are active decreases as both the size of their group increases, and the amount at stake for each individual decreases. 179 If the facility is costly for the community and its residents, the opposition will therefore be strong. In such a case, the number of people concerned is small and the stakes for each individual are high. On the other hand, larger, more diffuse groups of beneficiaries are not likely to become as actively involved. 180 The drafters of the Act hoped that if the benefits of the project were to equal or even outweigh the costs, local opposition would decrease. If that were to happen, "the community should no longer have any incentive to oppose. Indeed, if the benefits to the community are large enough, it might actually desire the facility." 181

To achieve such a turnaround in public reaction, the costs to the communities must be reduced. Any benefit that has this effect is a

177 If the community possessed unlimited police power, they could refuse to participate in negotiations. Preemptive measures are only relevant insofar as they are the precondition to meaningful negotiations. The remainder of this article focuses on the means of negotiation, rather than on state preemptive measures.
178 See Bingham & Miller, supra note 2, at 478; Bacow & Milkey, supra note 60, at 275.
180 M. O'Hare, L. Bacow & D. Sanderson, supra note 2, at 69. See also Bingham & Miller, supra note 2, at 478–80; Bacow & Milkey, supra note 60, at 275.
181 Bacow & Milkey, supra note 60.
compensation payment, and commentators have identified five primary types of compensation. Monetary payments are made when the developer offers payment to affected residents or communities. These payments can be on a lump sum or a continuing payment basis. The latter can take the form of a payment in gross receipt taxes, or a higher property tax payment. Conditional compensation payments are made for costs that are feared but not certain. For example, a developer might guarantee the stability of property values, or offer insurance for possible property losses. In-kind compensation payments are made when the developer offsets the costs imposed by replacing the affected resource or services. For example, recreation land might be offered in return for the land to be occupied by the facility. The major advantage of such in-kind compensation is that it is visibly linked with the specific effects of the project. Impact mitigation is the attempt by a developer to eliminate or reduce the project's negative effects. For example, the facility design might be altered or its operation modified, or the developer might provide new fire protection equipment to the municipality.

In addition to the strategic effect of compensation, there are also efficiency grounds that make this approach appealing to developers. If the developer must compensate for the social costs of the facility, there is a strong incentive to reduce these costs. A negotiated siting agreement requires early and active involvement of the affected parties in the decision-making process. The developer

\[182\] M. O'HARE, L. BACOW & D. SANDERSON, supra note 2, at 71. See also McMAHON, supra note 100, at 5-17. See also CONSERVATION FOUNDATION, SITING HAZARDOUS WASTE MANAGEMENT FACILITIES 15 (1983).

\[183\] McMAHON, supra note 100.

\[184\] Id. at 11-16.

\[185\] Id. at 37-42.

\[186\] Negotiation procedures seem to be the most appropriate method for the determination of the amount and the type of compensation. Some states, however, set statutory compensation, and some scholars have proposed site auctions. See e.g., O'Hare, supra note 57, at 406. Some states fix compensation as a function of the gross receipts or amount of wastes generated by the facility. Other states allow the local community to assess a special tax or licensing fee up to a specific amount. Some commentators assert that these statutes are designed to enable communities to recover direct expenses associated with the facility rather than to a compensate all social costs of the facility. Bacow & Milkey, supra note 60, at 279.

\[187\] M. O'HARE, L. BACOW & D. SANDERSON, supra note 2, at 71.

\[188\] The incentive approach "internalizes the external costs of the facility by requiring the developer to compensate for those costs, thereby bringing about a more efficient allocation of resources." Bacow & Milkey, supra note 60, at 276 n.63. See also M. O'HARE, L. BACOW & D. SANDERSON, supra note 2, at 81-84; R. STEWART & J. KRIER, ENVIRONMENTAL LAW AND POLICY 113-16 (1978).
thus has a strong incentive to start negotiations as soon as possible. The decide-announce-defend attitude would no longer be in the developer's interest. The communities, on the other hand, would have a wider range of options than merely the decision to build or not to build the facility. The new Massachusetts approach is designed to ensure that interested parties remain in communication from the beginning to the end of the siting process. The participation of the community and its residents is therefore not restricted to a few public hearings.

There are nevertheless certain basic issues still to be resolved if a siting process based on negotiation is to work effectively. First, it must be decided who will negotiate on behalf of the community. Second, an equivalency of power is necessary for effective bargaining. The community must have access to sufficient technical and financial resources to coordinate its end of the negotiations. Third, there must be some incentive to bargain in good faith, as well as some time limit for the negotiations. Fourth, there must be some procedure that is invoked if there is an impasse in negotiation. Mediation and arbitration procedures thus become particularly important. Finally, enforcement mechanisms are required to make the whole enterprise workable.

C. The Massachusetts Hazardous Waste Facility Siting Act: Statutory Requirements

Pursuant to the Massachusetts Hazardous Waste Facility Siting Act, a developer must obtain several licenses and permits prior to the construction of a facility. The operating license must be obtained from the State Department of Environmental Quality Engineering (DEQE); the site assignment must be obtained from the local board of health; and siting agreement must be signed with the local assessment committee (LAC), which is a representative body of the

---

191 MASS. GEN. LAWS ANN. ch. 111, § 150B (West 1983).
192 Massachusetts Hazardous Waste Facility Siting Act of 1980, MASS. GEN. LAWS ANN. ch. 21D, § 12 (West 1981). While a signed siting agreement is necessary for both the construction of new facilities and the expansion of old facilities, MASS. ADMIN. CODE tit. 990, § 1.02 (1985), some types of hazardous waste facilities are exempt from the statute's requirements. Id. The most important exemption is for on-site disposal. MASS. ADMIN. CODE tit. 990, § 1.02(2)(a) (1985).
The siting agreement, which describes the facility construction and monitoring procedures, as well as the mitigation and compensation efforts of the developer, is the new statutes most important departure from the former Massachusetts statute.

In any Massachusetts hazardous waste facility siting proposal, there are three primary state agencies involved: the DEQE, the Department of Environmental Management (DEM), and the Hazardous Waste Facility Site Safety Council (HWFSSC). The task of the DEQE is limited to the issuance of licenses. While the DEM is not involved in the license procedure, it is responsible for attracting developers to Massachusetts, for soliciting and evaluating construction proposals, for studying the risks and impacts of hazardous waste management technologies, and for disseminating all such information to the public. As part of its obligation to inform the public, the DEM is required to conduct briefing sessions about the proposed facility. The DEM must also prepare an annual state environmental impact report that describes and evaluates the hazardous waste management situation in Massachusetts. The HWFSSC oversees and facilitates the negotiation process between the developer and the municipality. At the end of the procedure, the HWFSSC declares that the siting agreement is operative.

The HWFSSC is a new state agency, created because existing agencies lacked the neutrality necessary to facilitate the negotiations. The HWFSSC is composed of twenty-one members: eight state officials or their designees, seven representatives of various interest groups, and six representatives of the general public. In addition, two temporary members from the host community may be appointed “for the purpose of participating in and voting upon matters relative to the site selection” in their communities.

In order to initiate the siting process and to fulfill the statutory requirements, the prospective developer must file a notice of intent with the HWFSSC, and pay an application fee. The notice of

---

193 The term "host community," is defined as the "city or town in which a developer proposes to construct, maintain and operate a hazardous waste facility." MASS. GEN. LAWS ANN. ch. 21D, § 2 (West 1981).
194 Id. § 3.
195 Id. § 8.
196 Id. § 10; MASS. ADMIN. CODE tit. 990, § 1.00–16.00.
198 All representatives are appointed by the governor to a four to five year term. No member is permitted to have a financial interest in any work of the HWFSSC. Id.
199 Id.
200 Id. § 7. The developer submits a notice of intent to the HWFSSC, the DEM, the DEQE,
1986] HAZARDOUS WASTE FACILITY SITING 359

intent is intended to inform the public and to provide the necessary information to the HWFSSC. Since these are somewhat limited purposes, the developer is not required to submit a detailed design of the facility, but instead must file only a general description of the proposal. The elements of the description include the identification of the waste to be processed on the site, the procedure and technologies to be used, the developer's prior experience with hazardous waste facilities, and general financial data.202 The developer must also describe and explain the types of special benefits that may be included in a negotiated siting agreement. After a forty-five day public comment period, the HWFSSC determines whether the notice of intent is complete.203

Within fifteen days of its receipt of a completed notice of intent, and upon consultation with the DEQE, the HWFSSC determines whether the proposal is "feasible and deserving of state assistance."204 The purpose of this decision is to screen out proposals that are obviously inappropriate.205 The "feasible and deserving" finding does not mean that the state has approved the construction of the proposed facility; only that the proposal warrants further and detailed review,206 and merits the expenditure of state funds.

The HWFSSC uses two sets of criteria in making its determination.207 The first set relates to financial capability, technological feasibility, need for the facility, past management practices of the developer, and compliance with federal or state laws and regulations.208

the host community, the abutting communities, and the regional planning agency of which the host community is a member. MASS. ADMIN. CODE tit. 990, § 4.04 (1985).
іі MASS. ADMIN. CODE tit. 990, § 4.01 (1985).
ііі MASS. GEN. LAWS ANN. ch. 21D, § 7 (West 1981). Usually a developer must submit a detailed proposal as a preliminary step in the siting process. This procedure could, however, limit citizen participation.
іііі The HWFSSC is required to issue a press release announcing the public comment periods and must publish that announcement in the Environmental Monitor, a publication of the DEQE. MASS. ADMIN. CODE tit. 990, § 4.05 (1985).
ііііі MASS. GEN. LAWS ANN. ch. 21D, § 7 (West 1981); MASS. ADMIN. CODE tit. 990, § 5.00 (1985).
іііііі See Bacow & Milkey, supra note 60, at 282.
ііііііі MASS. ADMIN. CODE tit. 990, § 5.02 (1985). If the HWFSSC's decision is negative, the statute does not prevent the developer from negotiating a siting agreement with the host community and receiving the necessary permits. It is not likely, however, that the developer would succeed without a positive decision of the HWFSSC. See Bacow & Milkey, supra note 60, at 296; M. HUNSBERGER & S. FARRELL, THE SITING BOOK: A GUIDEBOOK FOR SITING HAZARDOUS WASTE FACILITIES IN MASSACHUSETTS 12 (1983).
іііііііі For a general discussion of these criteria, see the preamble of the Massachusetts Hazardous Waste Facility Siting Act of 1980.
ііііііііі MASS. ADMIN. CODE tit. 990, § 5.03 (1985).
The second set relates to state laws governing land use in certain sensitive environmental areas; for example, flood plains, state parks, and the coastal zone.\textsuperscript{209} An important legal question arises as to whether there is any judicial review of the HWFSSC's feasible and deserving determination.\textsuperscript{210} In \textit{Town of Warren v. Hazardous Waste Facility Site Safety Council},\textsuperscript{211} the Massachusetts Supreme Judicial Court held that the HWFSSC's feasible and deserving determination is not subject to judicial review. In this case, the HWFSSC had decided that a designated site in the town of Warren, was feasible and deserving of state assistance. The town of Warren argued that the Massachusetts Administrative Procedure Act\textsuperscript{212} entitles an aggrieved party to judicial review of a "final decision of any agency in an adjudicatory proceeding." The court held that the HWFSSC's determination was not a final decision, but instead was a preliminary step in a lengthy siting process. Furthermore, an adjudicatory hearing was not required because:

\textit{[t]he only rights, duties or privileges of the town that were affected by the feasibility determination were related to public, or political or legislative functions of the town. Therefore, the Council's determinations, as they affected the town, were not made in an adjudicatory proceeding, and they are not subject to judicial review.}\textsuperscript{213}

The HWFSSC thus had enormous power to approve or to screen out siting proposals. In Massachusetts, instead of proposing a specific site, a developer may instead choose to participate in a site suggestion process.\textsuperscript{214} This is possible if the developer is willing to accept site suggestions other than the site suggested in his or her notice of intent.\textsuperscript{215} The site suggestion process is coordinated by the DEM, which accepts suggestions from state agencies, the developer, com-


\textsuperscript{210} See Bacow & Milkey, \textit{supra} note 2, at 295–96.

\textsuperscript{211} 392 Mass. 107, 466 N.E.2d (1984).

\textsuperscript{212} \textit{MASS. GEN. LAWS ANN.} ch. 30, § 14 (1979).

\textsuperscript{213} \textit{Town of Warren}, 392 Mass. at 117. See also Cronin, \textit{Case and Statute Comments}, 70 \textit{MASS. L. REV.} at 40 (1985).

\textsuperscript{214} \textit{MASS. GEN. LAWS ANN.} ch. 21D, § 9 (West 1981). The person making the site suggestion must specify how the site meets the characteristics identified in the notice of intent, and must secure the owner's willingness to submit the site for suggestion. \textit{MASS. ADMIN. CODE} tit. 990, §§ 7.02(3),(4) (1985). At any time during the site selection, the developer may submit a notice of intent for any acceptable site. \textit{Id.} § 7.03. The developer therefore may choose a site that is technically not the best available site.

\textsuperscript{215} \textit{Id.} § 7.02(3), (4).
munities, and persons with financial interests in the suggested site. If the DEM receives no suggested sites, it may suggest a reasonable site.\textsuperscript{216}

Before the final site selection is made by the HWFSSC, a forty-five day public comment period is required for any suggested site.\textsuperscript{217} Within seven days after the comment period, the developer must identify to the HWFSSC all sites in which he or she is interested.\textsuperscript{218} The HWFSSC then eliminates inappropriate sites that do not meet the feasible and deserving criteria, are not acceptable to the developer, or that have been withdrawn from consideration by the owner. If more than three sites remain after this elimination process, the HWFSSC applies a specific set of guidelines to identify a final set of three sites.\textsuperscript{219} After the final set of three sites is established, the developer selects a preferred site.\textsuperscript{220} Finally, the DEM notifies all interested parties, as well as the general public, of the final list of suggested sites.\textsuperscript{221}

1. Citizen Participation

After the HWFSSC makes the "feasible and deserving" decision, the DEM conducts public briefing sessions to ensure the participation of interested persons and to inform the public about every proposal.\textsuperscript{222} These sessions encourage a continuous flow of information to the general public. The number of sessions is not limited; one session must be held within thirty days of the HWFSSC determination,\textsuperscript{223} and at least one of the sessions must explain the siting process, the community's role in the negotiation, and describe the proposed project.\textsuperscript{224} The content and scheduling of these briefing sessions is determined by the DEM after consultation with the developer and the chief executive officer of the host community.\textsuperscript{225} The public is invited by a notice in the local press.\textsuperscript{226}

\textsuperscript{216} Id. § 7.02(5).
\textsuperscript{217} Id. § 7.04(1). In the site suggestion process, there are two comment periods regarding the same notice of intent.
\textsuperscript{218} Id. § 7.04.
\textsuperscript{219} Id. § 7.04(4).
\textsuperscript{220} Id.
\textsuperscript{221} Id. § 7.05.
\textsuperscript{222} Id. § 6.01. See also Mass. Gen. Laws Ann. ch. 21D, § 8 (1981).
\textsuperscript{223} Mass. Admin. Code tit. 990, § 6.03(1).
\textsuperscript{224} Id. § 6.02.
\textsuperscript{225} Id.
Within thirty days of the filing of the notice of intent, the chief executive officer of the host community must form a “local assessment committee” (LAC).\footnote{Id. § 8.01. If the municipality's chief executive officer fails to take appropriate action to establish a LAC, the HWFSSC establishes one and appoints its membership. Id. § 8.03. For the non-site-specific notice of intent, the LAC must be formed within thirty days of publication of the final list of suggested sites Id. § 8.01.} The LAC is the formal mechanism through which the host community's interests are expressed in the siting process. The LAC represents the community in the negotiations with the developer. These negotiations determine what measures, beyond state license requirements, will be taken to protect the public health and safety, and the environment.\footnote{Mass. Gen. Laws Ann. ch. 21D, § 5 (West 1981).} The LAC is authorized to bind the community to the siting agreement. The LAC adopts its own rules and standards as may be necessary to carry out its functions and perform its duties.

The LAC consists of a maximum of thirteen members, five of which are statutorily required: the chief executive officer of the host community; the chair of the local board of health; the chair of the local planning board; the chair of the local conservation commission; and the chief of the fire department.\footnote{Mass. Admin. Code tit. 990, § 8.06 (1985); Mass. Gen. Laws Ann. ch. 21D, § 5 (West 1981).} The five statutory members select four residents of the community. The chief executive officer may nominate, and the city council approve, an additional group of not more than four members. This last group of appointees may include representatives of the abutting community.\footnote{Mass. Admin. Code tit. 990, § 8.02(1)(g) (1985). Abutting community is defined as “city or town contiguous to or touching upon any land in the host community.” Id. § 3.00.}

The LAC may apply to the state for technical assistance and planning grants to facilitate the negotiation process.\footnote{Id. § 9.05. The LAC and the chief executive officer of an abutting community may request reconsideration of any application that is denied. Id. § 9.09.} In deciding whether a grant shall be awarded, the HWFSSC considers whether the funds will be expended on projects clearly related to the siting process, whether the fees for the project are reasonable, and then determines whether the project itself is necessary. There are no financial limitations when additional requests are made, but the HWFSSC must consider whether the funds from previous grants were properly expended.\footnote{Mass. Gen. Laws Ann. ch. 21D, § 11 (West 1981); Mass. Admin. Code tit. 990, § 9.01-.02 (1985).} This approach allows the community to spend the funds in a manner best suited to its particular needs, but
it also ensures that the expenditures are clearly related to the siting process.\textsuperscript{233} Technical assistance grants provided to the community developer enable the affected parties to analyze the project and to gather information necessary for effective negotiations.\textsuperscript{234}

Pursuant to the Massachusetts statute, a developer is required to prepare a preliminary project impact report that examines the effects of the proposed facility.\textsuperscript{235} The report consists of two documents: an environmental impact report, and a socio-economic appendix.\textsuperscript{236} The Massachusetts Environmental Policy Act\textsuperscript{237} requires every state agency to review environmental impact reports and to minimize damage to the environment. This review process is designed to identify and make known to the public any potential negative impacts in the host and abutting communities.\textsuperscript{238}

Preparation of the environmental impact report begins when the developer files a project notification form\textsuperscript{239} that outlines the detailed analysis in the environmental impact report and the socio-economic appendix. It also notifies state agencies and the community that the impact report process has begun. The developer must file the project notification form within ninety days of the HWFSSC’s feasible and deserving determination.\textsuperscript{240}

The final environmental impact report is prepared only after a siting agreement is established.\textsuperscript{241} This report “shall be in accordance with the provisions of the siting agreement and... shall contain

\textsuperscript{233} See M. HUNSBERGER & S. FARELL, supra note 206, at 23.
\textsuperscript{234} See Bacow & Milkey, supra note 60, at 283; M. HUNSBERGER & S. FARELL, supra note 206, at 23.
\textsuperscript{235} MA\textsuperscript{2}SS. GEN. LAWS ANN. ch. 21D, § 10 (West 1981).
\textsuperscript{236} See MASS. ADMIN. CODE tit. 990, § 10.02 (1985).
\textsuperscript{237} MA\textsuperscript{2}SS. GEN. LAWS ANN. ch. 30, §§ 61-62H (1981). See also 301 MASS. ADMIN. CODE tit. 10.00 (1979).
\textsuperscript{238} Id. § 10.01 (1).
\textsuperscript{239} Id. § 10.01(6) (1985).
\textsuperscript{240} If the notice of intent is non-site specific, the project notification form must be filed within 120 days of notification of the final suggested site list. Id. § 10.01(2). If the project notification form is not filed within the time limits, and an extension has not been granted, the feasible and deserving decision will be rescinded. Id. § 10.01(3). There is a 20-day review period for public comment on the scope of the impact report. During this period, the HWFSSC and the State Executive Office of Environmental Affairs, which is responsible for the environmental impact report, organize public sessions to solicit recommendations for issues to be addressed in the impact report. The developer then prepares a draft environmental impact report and a draft socio-economic appendix. Id. § 10.02(1). The draft report analyzes the probable impacts and the alternatives of the project within the stipulated guidelines. Public comment on the draft is accepted for 30 days. Within seven days of the close of the comment period, both agencies involved decide whether the report properly complies with the statute.
\textsuperscript{241} MA\textsuperscript{2}SS. GEN. LAWS ANN. ch. 21D, § 10 (West 1981).
information, comments, and facility redesign data resulting from the negotiations."\textsuperscript{242} The period for public comment is thirty days.\textsuperscript{243} The HWFSSC and the State Executive Office of Environmental Affairs must both approve the document.

2. The Negotiation Process

Formal negotiations take place between the LAC and the developer.\textsuperscript{244} The negotiations are intended to result in a siting agreement that must be signed before the developer is permitted to construct the facility.\textsuperscript{245} It is worth noting here that the basic environmental and public health protection provided for by state and the federal laws are not subject to negotiation. Bargaining is only over the stricter, or supplementary, standards. The parties thus negotiate over measures that are specially tailored to alleviate the community's particular concerns about environmental and socio-economic impacts.\textsuperscript{246} The resulting siting agreement is a nonassignable contract, and is enforceable in court against the parties.\textsuperscript{247}

The Massachusetts statute lists a number of issues that must be addressed in any siting agreement, including: facility construction and maintenance procedures; facility design and operation procedures; monitoring procedures; services provided by the developer to the community; compensation provided by the developer to the community; services and benefits provided by the state agencies to the community; provisions for pre-payments, accelerated tax payments, or payment in lieu of taxes; provisions for renegotiating, amending, or extending the agreement; provisions for resolving disagreements; and compensation to be provided to abutting communities.\textsuperscript{248}

Before the initiation of formal negotiations, the developer and the community may agree to employ a mediator at their own expense.\textsuperscript{249} If the parties refuse a mediator, or if the HWFSSC determines that the negotiations are not progressing satisfactorily, then the

\textsuperscript{242} Id.
\textsuperscript{243} Public comment on the final socio-economic appendix is limited to the issues raised during the review of the draft report.
\textsuperscript{246} M. Hunsberger & S. Farrell, supra note 206, at 22.
\textsuperscript{247} Mass. Admin. Code tit. 990, § 14.01 (1985). The developer is not bound to construct the facility, but if it is constructed, the construction must be in accordance with the agreement.
HWFSSC may require the parties to employ a mediator.\textsuperscript{250} In such a case, the mediator is selected and compensated by the HWFSSC. The mediator aids the parties in executing a siting agreement, and holds meetings at times and places convenient to both parties. The mediator notifies both the HWFSSC and the DEM as to the time and place of the meetings and of any progress in the negotiations.

If no siting agreement is reached within sixty days of a determination that the socio-economic appendix is adequate, the parties are required to submit a negotiation status report to the HWFSSC and to the DEM.\textsuperscript{251} The report identifies unresolved issues and suggests whether and when negotiations are expected to be completed. At any time subsequent to the submission of the report, the developer or the LAC may notify the HWFSSC that an impasse in the negotiations has been reached. The HWFSSC then determines whether an extension is warranted, whether an impasse actually exists, and when final binding arbitration will begin.\textsuperscript{252}

A single arbitrator or a panel of three arbitrators is chosen jointly by the developer and the LAC.\textsuperscript{253} If the parties fail to reach a decision within thirty days after the impasse has been declared, the HWFSSC appoints the arbitrators. The arbitrators organize a pre-hearing conference with the parties and may hold as many formal hearings as necessary within the forty-five day arbitration period.\textsuperscript{254} The LAC, the developer, witnesses, legal counsel, and technical experts for either party are entitled to attend the hearings. The arbitrator has the right to determine which other parties may attend and when a party may be excluded for disrupting the orderly process of the hearing.\textsuperscript{255}

In making a decision, the arbitrators must consider the factual presentation of the parties; the interests of the host community, the abutting community, the developer, and the developer's management and operational history.\textsuperscript{256} After the last hearing, a draft settlement for review is prepared, and after consideration of comments made by the parties affected, a final draft of the siting agreement or of

\textsuperscript{250} Id. § 11.02(2)
\textsuperscript{251} Id. § 11.03.
\textsuperscript{252} MASS. GEN. LAWS ANN. ch. 21D, § 15 (West 1981).
\textsuperscript{253} One member each is selected by the developer, one by the LAC; and the third, who acts as chair of the panel, is jointly selected. MASS. ADMIN. CODE tit. 990, § 13.02 (1) (1985).
\textsuperscript{254} Id. § 13.04(1).
\textsuperscript{255} Id. § 13.04.
\textsuperscript{256} Id. § 13.05. For a discussion of whether the lack of precise statutory standards governing the arbitrator's decision is legal, see Bacow & Milkey, supra note 60, at 288–92.
compensation to be paid is submitted to the HWFSSC. The Arbitrator's decision is subject to judicial review pursuant to the Uniform Arbitration Act of Commercial Disputes.

Abutting communities are also directly involved in the siting process. In addition to the involvement already described, these communities may petition the HWFSSC, within sixty days of the approval of the draft impact report, to seek compensation from the developer for "demonstrably adverse impacts of the current proposed project." In filing a petition, the chief executive officer for the abutting community agrees to accept compensation as full settlement for any claim against the developer for the project's adverse impacts. After approval of the siting agreement, compensation is established in an adjudicatory hearing held by the HWFSSC.

3. Licenses and Permits

The developer of a hazardous waste facility must also obtain a license from the DEQE. The DEQE issues a license if the facility "does not constitute a significant danger to the public health, public safety, or the environment, does not seriously threaten injury to the inhabitants of the area or damage to their property, and does not result in the creation of noisome or unwholesome odors." The license procedure is designed to guarantee that all facilities meet the same management standards and technical requirements.

---

258 Mass. Gen. Laws Ann. ch. 251, §§ 1–19 (West Supp. 1985). The court may vacate an award, for example, where the arbitrator has shown evidential partiality, acted ultra vires, or there was a corruption, fraud or other undue influence. For a detailed discussion, see Bacow & Milkey, supra note 60, at 297–301.
260 Mass. Admin. Code tit. 990, § 12.03 (1985). The abutting community and the developer are required to meet at least once before the hearing proceeds in order to define the issues and explore possible compensation. Id. § 12.04. The public hearing is conducted by a presiding officer who produces a tentative determination of the compensation to be given by the developer. After a 45-day review period, the HWFSSC issues a final determination. Both the abutting community and the developer may request judicial review of the final arbitration. Id. § 1206.
262 Id.
263 Although DEQE's primary role in facility siting is its licensing responsibility, it holds a seat on the HWFSSC and is therefore involved in the facility proposal from the time the notice of intent is submitted. The timing of the siting schedule depends on the proposed facility's size and complexity. A public comment period of at least 45 days begins when DEQE issues a notice that a draft license has been prepared, or that a draft license has been tentatively denied. Mass. Admin. Code tit. 310, § 30.833 (1983). DEQE holds an informal
On the community level, the most important step in the siting process is the site assignment by the local board of health.\textsuperscript{264} The local board of health must assign a site if the proposed facility imposes no significantly greater danger to the public health or public safety from fire, explosion, pollution, discharge of hazardous substances, or other construction or operational factors than the dangers that currently exist in the conduct and operation of other industrial and commercial enterprises in the commonwealth not engaged in the treatment, processing or disposal of hazardous waste, but utilizing processes that are comparable.\textsuperscript{265}

The new Massachusetts statute provides that, before reaching such a conclusion, the local board of health must hold an informal public hearing, and if the board refuses the site assignment, an appeal to the superior court is possible.\textsuperscript{266} If the board grants the assignment, an appeal to the DEQE is available.\textsuperscript{267} If the maintenance and operation of a facility results in a significant danger to the public health, or does not comply with the site assignment, the DEQE may rescind, suspend or modify the original permit after due notice and an adjudicatory hearing.\textsuperscript{268}

In addition, the developer must obtain all other permits required by the municipality. The number and the nature of these requirements differs from community to community.\textsuperscript{269} In order to prevent municipalities from creating requirements that make siting impossible, the statute contains a preemption provision. The statute amends the Massachusetts Zoning Act\textsuperscript{270} by making a hazardous waste facility a permitted use on any land in any industrial zone. Furthermore, a community is not permitted to rezone such land

\textsuperscript{264} MASS. GEN. LAWS ANN. ch. 111, § 150B (West 1983).
\textsuperscript{265} Id.
\textsuperscript{266} Id. For a more sophisticated discussion, see Bacow & Milkey, supra note 60, at 297.
\textsuperscript{267} MASS. GEN. LAWS ANN. ch. 111, § 150B (West 1983).
\textsuperscript{268} Id.
\textsuperscript{269} The developer might, for example, need a building permit, a fire permit, or, if the facility proposal involves the alteration of wetlands, a review by the conservation commission. See M. HUNSBERGER & S. FARRELL, supra note 206, at 39–42. Local communities are prohibited from requiring permits that had been unnecessary prior to the effective date of the statute. MASS. GEN. LAWS ANN. ch. 21D, § 16 (West 1985).
after a notice of intent is filed. The facility therefore cannot be excluded by changing the zoning of the proposed site.

The eminent domain power is not available to avoid land use permits: the developer may only petition DEM to use the eminent domain power if all formal license and permit requirements are obtained. The developer must also have made an unsuccessful, but good faith effort, to buy or lease the property in question. Within forty days of receipt of the developer’s petition, the DEM conducts a public hearing. The DEM’s final decision, however, requires a majority vote of the governing body of the host community. If this approval is granted, DEM may lease the site to the developer.

IV. NEGOTIATIVE SITING TECHNIQUES: OTHER STATES’ EXPERIENCE

A. Rhode Island

The Rhode Island statute’s negotiation procedure is similar to the Massachusetts approach. The Rhode Island Hazardous Waste Management Facility Act of 1982 provides that no hazardous waste facility may be constructed, nor may any local permit be issued, unless there is a siting agreement in force between the host community and the developer. If the neighboring community shows that the proposed facility has a probable and significant adverse impact on the community, the statute requires that an impact agreement be signed by the neighboring community and the developer.

The Rhode Island statute provides that the siting agreement must specify the terms and the conditions under which a hazardous waste

271 MASS. GEN. LAWS ANN. ch. 21D, § 16 (West 1985).
272 MASS. GEN. LAWS ANN. ch. 21D, § 17 (West 1981). See also MASS. ADMIN. CODE tit. 990, § 15.00 (1985).
273 Id. § 15.04.
275 R.I. GEN. LAWS ANN. § 23–19.7–5.(a)(1) (1985). The statute defines host community as “a city or town of the state in which a developer proposes to site, construct, substantially alter or operate a hazardous waste management facility.” Id. § 23–19.7–3. (B) (1985). The Rhode Island statute provides limited preemptive authority. The siting of new facilities is permitted on any land zoned for industrial use. The communities are not allowed to rezone land once an application for a facility has been submitted.
276 The statute defines neighboring community as “a city or town which shares a common border with a host community as defined herein, or which, absent a common border, lies in whole or in part within a one-mile radius of the lot or lots on which a developer proposes to site, construct, substantially alter or operate a hazardous waste management facility.” Id. § 23–19.7–3(12) (1985).
277 Id. § 23–19.7–5.(a)(1), 23–19.7–9 (a)-(c) (1985).
facility shall be sited, operated or altered.\textsuperscript{278} The negotiated contract is binding and enforceable against the parties.\textsuperscript{279} The agreement may include the following terms: construction, operation, closure and post-closure procedures; design of the facility; monitoring procedures necessary to assure and continuously demonstrate that the facility will be operated safely; compensation, services, and special benefits that will be provided to the host community; provisions for renegotiation of the agreement and for resolving any dispute over the interpretation of the siting agreement; provisions to assure the public health, welfare and environment in the host community; and provisions for reimbursement by the developer to the host community of reasonable costs associated with assessment, negotiation and arbitration of the siting agreement.\textsuperscript{280} The impact agreement may address in its terms the mitigation of, or compensation for, those "adverse health, safety, environmental and fiscal impacts which are shown by the neighboring community to be likely and significant."\textsuperscript{281}

During the siting negotiations, the host and the neighboring community are represented by the local assessment committee (LAC).\textsuperscript{282} The LAC is assembled within forty-five days after the issuance of the state permit. The LAC consists of no less than five and no more than nine members. It is required to include the chief executive officer, the city or town council president, the chair of the planning commissions, and not less than two public members appointed by the community's chief elected official. One of these members is to be knowledgeable in environmental matters.\textsuperscript{283}

If, ninety days after the establishment of the LAC, the developer or the chief elected official of the host or neighboring community finds that an impasse exists in the negotiations, either party may invoke a binding arbitration procedure\textsuperscript{284} which is limited to those issues remaining in dispute. An arbitration panel is established within thirty days after the arbitration procedure is invoked. One arbitrator is selected by the developer, one by the LAC, and a third is selected jointly. The arbitration panel must render a final and binding decision within forty-five days after it is established.\textsuperscript{285}

\textsuperscript{278} Id. § 23–19.7–3(18), 23–19.7–6.(B)(5) (1985).
\textsuperscript{279} Id.
\textsuperscript{280} Id. § 23–19.7–8 (1985).
\textsuperscript{281} Id. § 23–19.7–9. (a)(2) (1985).
\textsuperscript{282} Id. § 23–19.7–6 (1985).
\textsuperscript{283} Id. § 23–19.7–6(a) (1985).
\textsuperscript{284} Id. § 23–19.7–10(a) (1985).
\textsuperscript{285} Id. § 23–19.7–10(a), (b)(1), (3) (1985).
statute mentions only general prerequisites for the arbitration award, which may be appealed to the superior court within thirty days of its granting.

B. Wisconsin

The Wisconsin statute provides for siting procedures that are nearly as complex as those in the Massachusetts statute. The Wisconsin statute provides for a different approach, however, for the regulation of the negotiation and the arbitration process. Pursuant to the Wisconsin statute, the Wisconsin Waste Management Program requires a siting agreement to be signed in addition to both local approvals and the operating license issued by the Department of Natural Resources. If the community refuses to negotiate, the developer may seek state approval without a siting agreement or local approvals. Unlike other statutes, the Wisconsin statute applies to both hazardous and solid waste disposal facilities. The negotiation and arbitration procedure that results in the siting agreement is supervised by the Waste Facility Siting Board (WFSB).

Wisconsin negotiation procedures commence when the developer sends a written request to the community for a specification of all applicable "local approvals." In the request to the community, the developer includes a copy of the WFSB's standard form notice concerning the negotiation and arbitration process. Within fifteen days after a request, the municipality must provide the developer with a list of all required local approvals. This provision prohibits

---

286 Id. § 23-19.7-10(b)(7) (1985).
287 Id. § 23-19.7-10(c)(1) (1985).
288 WIS. STAT. ANN. §§ 144.43 (West Supp. 1985). For a description of the Wisconsin program, see Harrington, supra note 70, at 223.
289 WIS. STAT. ANN. § 144.44(1)(m) (West Supp. 1985).
290 Id. § 144.44(4)(a) (West Supp. 1985). The licensing process essentially involves three stages: feasibility, plan of operation and licensure. Id. § 144.44 (2)-(4) (West Supp. 1985). The legislative intent of the arbitration and negotiation procedure is to set aside local government's arbitrary or discriminatory policies that obstruct the construction of new facilities; to allow the expression of legitimate citizen concerns; to assure the establishment of environmentally sound and economically viable facilities. Id. § 144.445(2) (West Supp. 1985).
291 Id. § 144.445(1) (West Supp. 1985).
292 Id. § 15.101(14), 15.105(12) (West 1996). The siting board consists of eight members: the secretaries of the department of industry, labor and human relations, transportation, trade and consumer protection and development; two town officials; and one county official. The town and county officials are appointed by the governor.
294 WIS. STAT. ANN. § 144.44(1m)(b) (West Supp. 1985).
attempts by the municipalities to adopt requirements that would prohibit the siting of hazardous waste facilities within their boundaries.\textsuperscript{295}

After the request for specification of all local approvals, the affected municipalities may adopt a siting resolution and may appoint members to the local committee (LC).\textsuperscript{296} The resolution states that the municipality intends to participate in the negotiation and arbitration process. The LC is the body authorized to negotiate the siting conditions with the developer. It may conduct public information hearings at any time concerning the siting agreement.\textsuperscript{297} The governing body in the proposed host community appoints four members to the LC, two of whom may not be municipal employees or elected officials. The county of the host community appoints two members. The other affected municipalities appoint one member.\textsuperscript{298} The size of the LC therefore depends on the number of affected municipalities. The LC, however, receives no technical assistance grants from the WFSB: compensation for the expenses during the negotiations are part of the siting agreement. If the municipalities fail to adopt a siting resolution, or to appoint members to the LC, the developer may seek state approval without being required to negotiate with the municipality.\textsuperscript{299}

The negotiations between the developer and the LC may begin at any time after the appointment of the LC members. The negotiation sessions are open to the public\textsuperscript{300} and the parties are allowed to negotiate on any subject except either the applicant’s responsibilities under the license requirements, or the need for the facility.\textsuperscript{301}

Either party may request a mediator\textsuperscript{302} at any time during the negotiation period; the mediators’ function is to encourage a vol-

\textsuperscript{295} Id. § 144.445, (5)(f), (3)(fm). \textit{See also} Nelson v. Dept. of Nat. Resources, 88 Wis. 2d 1, 276 N.W.2d 302, aff’d., 96 Wis. 2d 730, 292 N.W.2d 655 (1980) (legislatively overruled).

\textsuperscript{296} WIS. STAT. ANN. § 144.45(6)(a) (West Supp. 1985).

\textsuperscript{297} WFSB 6.01 (1984). A public informational hearing is defined as “a hearing where the local committee shall afford all interested persons or their representatives an opportunity to present facts, views or arguments relative to a proceeding before the board or the local committee.” WFSB 1.04(2)(a) (1984).

\textsuperscript{298} WIS. STAT. ANN. § 144.445(7)(a) (West Supp. 1985). Within 15 days after their appointment, the members of the LC file a statement regarding any personal economic interests that might be affected by construction of the facility. WFSB 4.01–4.03 (1984). The “affected municipality” is the host community, the host county, or the community or county within 1,200 feet of the proposed facility. WIS. STAT. ANN. § 144.43 (1) (West Supp. 1985).

\textsuperscript{299} WIS. STAT. ANN. § 144.445(9)(f) (West Supp. 1985).

\textsuperscript{300} Id. § 144.445(9)(a).

\textsuperscript{301} Id. § 144.445(8)(a).

\textsuperscript{302} Id. § 144.445(9)(c). \textit{See also} WFSB 8.01 (1984).
untary settlement of the dispute. The mediator has no authority to impose a settlement. The mediator may hold separate meetings with the parties or their representatives. The meetings may be closed. The cost of the mediator is to be shared equally between the developer and the LC.303

The Wisconsin statute makes it possible to petition to the WFSB for a determination as to whether a given set of facts establishes default.304 If the LC defaults, the developer may continue to seek state approval of the facility without proceeding with the negotiation and arbitration process. If the developer defaults, construction of the facility is disallowed. In general, nonparticipation in a negotiating session constitutes default. There are, however, two exceptions: nonparticipation for “good cause, or because further negotiations cannot reasonably be expected to result in a settlement.”305 In these cases, a public hearing must be held by the WFSB. This decision is subject to judicial review.

All issues that the parties agreed upon are incorporated into a written agreement.306 The agreement is submitted for approval by the appropriate governing body of the community.307 If the governing body does not approve the agreement, the agreement is void, and the negotiations continue.

In order to avoid endless negotiations, the Wisconsin statute provides for an arbitration procedure. If an agreement is not reached on any item “after a reasonable period of negotiation,” a petition for the initiation of arbitration may be submitted to the WSFB jointly or by either party.308 If the WFSB determines that further proceedings are warranted, it may request a status conference with the parties and a WFSB examiner.309

If the WFSB determines that further negotiations will not resolve the dispute, it agrees to hear the arbitration case. Either party may

303 WIS. STAT. ANN. § 144.445(9)(d) (West Supp. 1985). Mediation costs are only paid if the arbitration award or the siting agreement specifies an amount. Id.
304 Id. § 144.445(9)(e). See also WFSB 9.01–9.07 (1984).
306 Id. § 144.445(9)(g).
307 Id. § 144.445(9)(i). If the LC includes members from the local community, and this governing body approves the agreement, it is binding on all of the participating communities. On the other hand, the statute also provides that, if there is no host community in the LC, the approval of the governing body of all municipalities with members in the LC makes the agreement binding on all of the participating communities. Id. § 144.445 (9)(k) (West Supp. 1985).
submit a petition for the determination of an arbitrable dispute.\textsuperscript{310} WFSB must then conduct a public meeting, in which the parties have an opportunity to explain their arguments for their final offer.\textsuperscript{311} The Board then issues an arbitration award. This decision requires the approval of at least five of the eight board members.\textsuperscript{312} The WFSB may only accept one of the parties' final offers, and is not allowed to make any modifications. If the WFSB fails to issue an arbitration award, the governor must issue the arbitration award. However it is issued, the award is binding on the developer and the participating communities, and does not require any approval by the communities.\textsuperscript{313}

\begin{center}
C. Connecticut
\end{center}

The Connecticut Hazardous Waste Facility Siting Act of 1981,\textsuperscript{314} provides that a negotiated agreement is not a requirement for the receipt of a state license and local permits. In Connecticut, the owner or operator of a hazardous waste facility must compensate the municipality for adverse affects.\textsuperscript{315} The manner of such compensation is decided by the legislative body of the municipality; it is either an assessment or "negotiated incentives."\textsuperscript{316} Regardless of the compensation scheme the municipality chooses, the amount of the assessment or of the negotiated incentives, is fixed by statute, and is determined as a percentage of the facility's projected quarterly gross receipt.\textsuperscript{317}

\textsuperscript{310} WFSB 10.01 (1984). Only the following disputes are subject to arbitration: compensation to any person for substantial economic impact; reimbursement to the communities of the costs incurred during the negotiations; operational concerns such as noise, dust, etc.; traffic flows resulting from the facility; closing provisions; economically feasible methods of waste reduction and recycling at the facility; and applicability of pre-existing local approvals. Wis. Stat. Ann. § 144.445(8)(b) (West Supp. 1985).

\textsuperscript{311} Wis. Stat. Ann. § 144.445 (10)(o) (West Supp. 1985). See also WFSB 12.03 (1984). A public meeting is a meeting "conducted in any arbitration proceeding where the parties and only those parties to the arbitration or their representatives shall be afforded the opportunity to present facts, views or arguments relative to the arbitration." WFSB 1.04(c) (1984).


\textsuperscript{313} Wis. Stat. Ann. § 144.445(10)(q) (West 1985). The scope of judicial review for the arbitration award is governed by the Wisconsin Arbitration Act and is limited to procedural issues. See id. § 227.064(5), 227.22(2) (West 1982); Id. § 788.10, 788.11 (West 1981).


\textsuperscript{315} Id. § 22a-128.

\textsuperscript{316} Id. § 22a-128(b).

\textsuperscript{317} Id. § 22a-128(a). If the hazardous waste facility is located in more than one municipality, such compensation is to be made on a pro rata basis, calculated by the number of gallons or cubic yards of hazardous waste disposed of in each such municipality. Id. § 22a-128(b).
The negotiated incentive items include but are not limited to: payment to abutting landowners of the diminution of property values; purchase of a greenbelt buffer around the proposed facility for safety and aesthetics; development of open space and recreational facilities for the town; provision of the fire equipment that may be required by of the proposed facility; access routes to the hazardous waste facility; and direct financial payment. Any agreement reached through such negotiations would be consistent with the interests and the purposes of the statute.

A local project review committee (LPRC) negotiates as the representative of the community. An LPRC may be established in each proposed host community, and consists of not less than four and not more than nine members. One of the members must be from the community that will be most affected by the proposed facility, and is to be named by the State Siting Council (SSC). The SSC is the governmental agency that issues the certificate of public safety and necessity.

The negotiations begin after the municipality chooses to proceed with negotiated incentives rather than an assessment, and must be completed within sixty days. The developer and the LPRC each file a report with the SSC outlining the negotiable items, as well as the points of agreement and disagreement. After the filing of these reports, the SSC may meet with the developer and the LPRC to discuss the negotiations and the reports. The LPRC functions as the sole arbitrator of disputes arising from the negotiations.

D. Comparative Analysis

This section of the article compares negotiation-based statutes, and discusses the technical prerequisites for successful negotiations: 1) incentives to negotiate; 2) party selection and the insurance of a balance of power among the negotiating parties; 3) a method for the resolution of impasses; and 4) enforcement mechanisms.

For the community, the primary incentive for participation in the negotiations is the expectation of compensation. The developer, on the other hand, expects the facility to be profitable and is therefore

---

318 Id. § 22a-128(c).
319 Id. § 22a-127.
320 Id. § 22a-117(a). The Connecticut statute provides that a facility developer must apply for a certificate of public safety and necessity, to be issued by the Connecticut Siting Council. The developer must additionally apply for all necessary state licenses and local permits. See id. § 22a-117(a), 22a-124(b).
willing to compensate the community to ensure its cooperation. All state statutes provide incentives for reaching agreements between the developer and the affected communities. 321

Pursuant to the Massachusetts and Rhode Island statutes, the communities are required to negotiate and to sign a siting agreement prior to the construction of a new facility. If a siting agreement is not concluded by the parties, the dispute is resolved by an arbitrator. 322 Since the outcome is thus taken out of the parties’ hands, arbitration gives them an additional incentive to reach their own decision. In both Rhode Island and Massachusetts, the state has insufficient preemptive authority to make the final decision. Preemptive provisions in both statutes merely authorize hazardous waste facilities as permitted land uses, and prohibit rezoning after a siting application has been submitted. 323 These statutory provisions do not overrule local authority, but they may force the affected community to participate in the negotiation procedure.

Pursuant to the statutes in Connecticut and Wisconsin, communities are given the option to negotiate. In Wisconsin, if the community refuses to negotiate, the developer may seek state approval of the facility and is not required to apply for local approval. 324 A siting agreement is necessary to the siting procedure only if the community participates in the negotiation. The Connecticut statute provides that the developer must pay a statutorily fixed amount of compensation for any new facility. 325 The community may elect between the payment of an assessment of negotiated incentives prior to the commencement of negotiations. Both statutes contain an arbitration procedure to resolve disputes. In sum, in all four states, developers are required to negotiate if they wish to proceed with the project. In Wisconsin and Connecticut, it is optional for the communities to negotiate, but if they do not, the state preempts local police power.

All four statutes also provide for local committees through which the interests of the community and its residents are represented in the siting process. In Massachusetts and Rhode Island town officials are also involved in the local permit process and are statutory members of these committees. In Massachusetts, the statutory members

appoint the other members; in Rhode Island and Connecticut, the committee members are appointed by the community's chief elected official; and in Wisconsin the governing body of the host community elects the members for the LC. None of the states require election of members through a referendum. All statutes, however, require a representation of community residents on the local committees. In general citizen involvement in the siting process is limited to their participation in informal public hearings. In Massachusetts and Wisconsin, negotiations between the local committee and the developer are open to the public; only in Massachusetts does the permitting agency hold public briefing sessions to inform citizens about the progress of the siting process.

In Wisconsin, Connecticut, Rhode Island and Massachusetts, the local committees are authorized to bind the community to a siting agreement or to a negotiated incentive agreement. The LCs receive technical assistance grants in Massachusetts, Rhode Island and Connecticut. In all four states, the negotiations are not restricted to any specific issues. The Wisconsin statute provides that the parties may negotiate any subject except either the need of the facility, or a proposal that renders the license requirement less stringent. Both the Massachusetts and Wisconsin regulations provide for a mediator who facilitates the negotiations between the parties. In Wisconsin either party may requires a mediator whose expenses are paid by the WFSB. In Massachusetts, the parties may agree to use mediation, or, in specified situations, the HWFSSC may require the use of a mediator.

All four statutes provide for arbitration to resolve impasses, but the point at which the parties may request arbitration varies. A

327 MASS. GEN. LAWS ANN. ch. 21D, § 8 (West 1981).
328 However, the 1,200 foot limitation on what areas constitute affected communities may prove insufficient to include all communities potentially affected by the proposed facility. In Wisconsin, each affected community appoints a member. WIS. STAT. ANN. § 144.445(7)(a) (West Supp. 1985). The number of members of the local committee therefore increases as the number of affected communities increase. In Connecticut, only the community which is likely to be the most affected appoints a member to the LPRC. CONN. GEN. STAT. ANN. § 22a–127(a) (1985). In Rhode Island, the abutting communities are entitled to negotiate a separate impact agreement and have their own committee if they can show that the proposed facility has a probable and significant adverse impact on their community. R.I. GEN. LAWS § 23–19.7.9 (1985).
331 See MASS. ADMIN. CODE tit. 990, § 11.02 (1985); WFSB 8.01 (1984).
petition for arbitration by either party is possible in Massachusetts sixty days after the preliminary project impact report has been completed; in Connecticut, sixty days after the local bodies make their final decisions about the local permits; in Rhode Island, ninety days; and in Wisconsin, 120 days after the local committee is formed. The Rhode Island and Massachusetts statutes provide that the arbitration panel resolves the dispute forty-five days after establishment. In Connecticut and Wisconsin, the siting boards are the sole arbitrators of the dispute. This solution is consistent with the wide preemptive authority given to the boards. All the statutes restrict the arbitration award to the issues in dispute. Judicial review of the arbitration award is limited to a consideration of procedural rather than substantive issues. Arbitration awards and siting agreements are binding upon the developer and the host community, and are enforceable in any court.

In sum, a comparison of all four statutes reveals a common pattern designed to ensure efficient negotiations: 1) a judicially enforceable siting agreement between the community and the developer; 2) local representative committees include community officials and citizens; 3) involvement of abutting communities and the general public in the siting process; 4) technical assistance grants for the local committee; and 5) deadlines for negotiations, and subsequent arbitration to resolve impasses and to render a final decision.

The basic difference among the statutes concerns the issue of whether the communities are obligated to negotiate. The Connecticut and Wisconsin statutes delegate the final siting decision to the siting board if the community resists negotiation. In Massachusetts and Rhode Island, an independent arbitrator makes the final decision. It is worth noting that the Wisconsin statute does not provide for technical assistance grants. It is therefore not clear how the balance of power in negotiations can be secured. The Massachusetts statute is careful to organize an equal bargaining situation by requiring the provision of unlimited grants to the local community and the preparation of a socio-economic appendix.

Conclusion

The final test of all administrative procedures is its practical implementation. In Massachusetts, five developers sought to locate hazardous waste facilities in the state. By 1985, each attempt had failed.

The early experience thus seems to support critics of the Massachusetts statute who claim that the social costs of hazardous waste
facilities are not compensable, and that a diffusion of public opposition is therefore not possible.\textsuperscript{332} In addition, the critics argue that the negotiating procedure provided for in the Massachusetts statute merely lengthens the siting process, whereas the use of preemptive authority would make the process workable and more efficient.

Nevertheless, a final judgment about the possibility of successful implementation of the Massachusetts statute is premature. The negotiation approach to siting new facilities in Massachusetts is relatively new, and the experience of five siting attempts is insufficient to prove the validity of such an administrative procedure. All the siting attempts were aborted before reaching the negotiation and mediation stage of the procedure. While the siting attempts revealed some of the statute's shortcomings, the legislation could be amended without changing the basic elements of the negotiation procedure.

On balance, however, when compared to the former Massachusetts approach, or to the strict preemption approach, the use of negotiation and mediation in the siting of new facilities has several advantages. The availability of compensatory payments addresses the underlying causes of public opposition. Communities remain continuously involved in the siting process, and the required agreement between a developer and a community provides the opportunity for more alternatives than simply the approval or disapproval of a particular project. Technical assistance grants provided by the state allow the community to develop its own position for negotiation with the developer. The Massachusetts statute provides further for the involvement of the general public and the abutting communities in the decision-making process, thus permitting them to influence the final result.

The Massachusetts statute thus represents an innovative approach to the resolution of hazardous waste facility siting problems. While it is still too early to pass final judgment on the effectiveness of this new approach, it is safe to say that, at least in theory, that it marks a considerable improvement over other similar efforts.

\textsuperscript{332} See Bacow & Milkey, \textit{supra} note 60, at 276–278.