The Search for Political Authority in Massachusetts’ Toxic Waste Management Law

Mary R. English
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I. INTRODUCTION

In the environmental movement of the 1980s, hazardous chemical wastes and radioactive wastes have taken center stage. Yet management of these wastes has been problematic, partly because of public reactions. Many people distrust toxic waste facility siting processes and withhold consent to their outcomes. As a result, siting is often delayed or completely blocked.

This paper examines how two toxic waste management laws in Massachusetts—the 1980 Hazardous Waste Facility Siting Act and the 1987 Low-Level Radioactive Waste Management Act—differ radically in the means by which each seeks to win the public’s trust and consent. As a prelude to this analysis, key points in the Acts are laid out. The analysis itself uses a theory of culture and risk management to explore the two Acts’ searches for political authority.

Only when legal authority is accompanied with political authority can acts such as these succeed. And given recent federal mandates for states to take responsibility for their toxic wastes,¹ success is now an imperative rather than an option.

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II. BACKGROUND

The 1980 Massachusetts Hazardous Waste Facility Siting Act\(^2\) was a bold departure from past approaches to siting locally unwanted but publicly necessary facilities. The Act was heralded as a deft combination of preemption and negotiation, and several states used it as a model for their own hazardous waste management laws.\(^3\) But by 1985, both practitioners and academicians were citing the Act, commonly referred to as Chapter 21D, as an example of what not to do.\(^4\)

Particularly interesting are the comments of a legislative commission established to determine how Massachusetts should manage its low-level radioactive wastes—wastes that, like toxic chemical wastes, provoke intense “not in my backyard” (NIMBY) sentiments. This commission noted that “serious flaws in both the language of Chapter 21D and its implementation have contributed to this state’s inability to make significant progress toward siting a hazardous waste facility.”\(^5\)

What caused the NIMBY reaction to Chapter 21D, and how have the framers of the Massachusetts Low-Level Radioactive Waste Management Act\(^6\) tried to avoid a similar reaction?

A. The Hazardous Waste Facility Siting Act

The Massachusetts Legislature adopted Chapter 21D after various developers had failed to site disposal or recycling facilities, largely because of local opposition.\(^7\) As passed, the Act has three key elements.

First, Chapter 21D establishes a state Hazardous Waste Facility Site Safety Council to make preliminary determinations of whether proposed projects are “feasible and deserving of state assistance.”\(^8\)

\(^7\) For a discussion of the events and conceptual work that led to ch. 21D, see generally M. O’Hare, L. Bacow, & D. Sanderson, Facility Siting and Public Opposition (1983).
The Council works with two state agencies: the Department of Environmental Management (DEM), which assesses the State’s need for hazardous waste facilities, and the Department of Environmental Quality Engineering (DEQE), which licenses and regulates such facilities.

Second, Chapter 21D gives a developer the right to construct a hazardous waste facility on land zoned for industry if the developer passes the “feasible and deserving” test, obtains the required state and local permits, and negotiates an agreement with the host community. Communities may not impose new permit requirements after Chapter 21D’s effective date.

Third, Chapter 21D directs the community and the developer to negotiate an agreement on the facility’s design and operation and on community compensation and impact mitigation. The Council provides technical assistance grants to the community to aid its negotiations. Binding arbitration may be used to break deadlocks.

By 1986, five projects had been attempted under Chapter 21D, but none had even made it to the negotiating table. Community protests and lawsuits had, in short order, blocked all of the proposals. In particular, communities sought to get the Council’s affirmative “feasible and deserving” determinations reversed. While these efforts did not always succeed in themselves, they succeeded in their underlying intent to deter the developers. Faced with intense local hostility and the prospect of long delays in court, each developer withdrew.

The Massachusetts experience is not unique; nationally, at least fifty percent of the proposals made under state hazardous waste facility siting programs have failed. Throughout the United States, these facilities are perceived as threats to a community’s physical and economic health. And these perceptions are understandable, given well-publicized disasters with hazardous materials and waste, such as those at Love Canal and Times Beach, and the prevalent image of hazardous waste facilities as “dumps.”

Thus, the Massachusetts approach cannot be rejected out of hand. Perhaps no other approach would have been successful, especially

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11 For a discussion of some of the early cases under ch. 21D, see M. O’Hare, L. Bacow & D. Sanderson, supra note 7.
in a politically contentious climate such as Massachusetts'. It is useful, nevertheless, to consider what hasn't worked with the Massachusetts model.

A number of difficulties attended Chapter 21D's inception. First of all, there was a lack of precedent because of the Act's innovative approach. Second, facility applications began to come in before rules could be promulgated. And third, the inexperience of all parties with this kind of negotiation contributed to a failure to begin talking before positions had hardened. But two problems in particular have continued to plague Chapter 21D: a profound objection by proposed host communities to being identified as targets for hazardous waste facilities, seemingly without a sufficient rationale; and an even more profound objection to the Council's early determination of a proposed project's "feasible and deserving" status—again, seemingly without a sufficient rationale.

To correct these problems, government, industry, and public interest groups have proposed extensive revisions to Chapter 21D. Among the first, and indicative of the thrust of the others, are the amendments proposed by Senator Carol Amick in 1986 and subsequently resubmitted. These amendments attempt to rectify Chapter 21D's problems in several ways.


14 During 1981, Notices of Intent had to be filed for facilities to be located in Haverhill and Warren. The regulations for Chapter 21D were, however, promulgated on April 29, 1982. See MASS. REGS. CODE tit. 990, §§ 1.00-16.00 (1986).

15 The meaning of "feasible and deserving" has been one of the greatest sources of contention and confusion in Chapter 21D's implementation. As the preamble to the Chapter 21D regulations promulgated April 29, 1982 notes:

For some, this determination was the equivalent of a licensing decision on the merits of the project itself, requiring the application of rigorous and exhaustive technical criteria, extensive deliberation and the full panoply of procedural guarantees. For others, the feasible and deserving determination called for by G.L. c.21D was at most a rough cut, intended only to identify those proposals so clearly unacceptable that they warrant summary dismissal and no further expenditure of state and local resources.

Preamble to MASS. REGS. CODE, tit. 990, §§ 1.00-16.00 (preamble presented by the Hazardous Waste Facility Site Safety Council and the Department of Environmental Management, Feb. 1984). Generally, the prospective host communities took the former view whereas the state took the latter view.

Most importantly, the amendments add statewide hazardous waste management planning to the Council’s responsibilities. In addition, they define the standards to be used by the Council in judging facilities, and they postpone and make less seemingly final the Council’s “feasible and deserving” determination. Finally, they improve the potential host community’s negotiating position (i) by giving the community more money initially in technical assistance grants and more time to negotiate before binding arbitration is initiated; (ii) by recommending a scale for the developer’s direct incentive payments to the community; (iii) by providing that host communities may also apply to the state for compensatory grants; and (iv) by guaranteeing the community access to the facility for environmental monitoring purposes.17

Senator Amick’s bill reflected the thinking of the special commission that she had co-chaired, with Representative Steven Angelo, to assess how low-level radioactive wastes should be managed.18 Subsequently, Governor Michael Dukakis proposed an even more radical revision of Chapter 21D. His April 1988 bill specified that the state government should take the lead role in identifying the number, size, and types of hazardous waste facilities in Massachusetts and potentially suitable areas in which they might be located. The Dukakis bill thus paralleled even more closely the recently enacted Low-Level Radioactive Waste Management Act.19

B. The Low-Level Radioactive Waste Management Act

In 1980, Congress enacted the Low-Level Radioactive Waste Policy Act, which requires that each state take responsibility for the disposal of low-level radioactive waste (LLW) generated within its borders.20 In response to this legislation, Massachusetts passed an
act in 1981 establishing a special commission to study LLW issues. The Amick/Angelo commission became staffed and operational in 1983. Over the next two years, it analyzed Massachusetts' current and projected LLW disposal needs and studied possible legislative approaches to siting a facility within the state. By 1985, it had prepared a draft bill for a Low-Level Radioactive Waste Management Act. After circulation for public comment and a series of public hearings, a final draft was submitted to the Legislature in 1986. The Legislature passed it with few changes, and Governor Dukakis signed it into law on December 8, 1987.

The Act has four crucial features. First, it establishes a board with central responsibility for the state's LLW management. Second, it specifies a six-phase management process, including planning and rule promulgation, site selection, operator and technology selection, facility approval, facility operation and closure, and post-closure institutional control. Third, it provides that, following a preliminary screening process and the selection and detailed characterization of several candidate sites, the board shall choose a facility site by a two-thirds vote. And fourth, it allows the host community to select the facility operator and disposal technology and to negotiate an impact mitigation and compensation agreement.

In designing the Act, the commission noted that it sought "a workable process that [would] not repeat the mistakes of Chapter 21D." In particular, the commission attempted to distinguish its proposed process from that of Chapter 21D by (i) instituting a pro-

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21 1981 Mass. Acts 738. The 20-member commission included three state senators, five state representatives, the Secretary of Environmental Affairs, the Commissioner of Public Health, five representatives of municipal, conservation, industrial, academic, and utility organizations, and five representatives of the public appointed by the Governor.

22 See generally Low-Level Radioactive Waste, supra note 5.

23 The Act was enacted, but not without controversy. In the course of the nearly two years between the originally proposed H.R. 5000 (1986 legislative session) and H.R. 5830 as enacted, the bill followed a rocky road, partly because of the debate over whether the "Chapter 503 test" should be included. See infra note 35. The federal Low-Level Radioactive Waste Policy Amendments Act of 1985 (P.L. 99-240) extended the 1980 Low-Level Radioactive Waste Policy Act's disposal facility deadline from 1986 to 1993 and established interim milestones to ensure that the new deadline would be met. It is doubtful whether, without the financial and disposal access penalties imposed in the event of failure to meet the January 1, 1988 milestone, the Massachusetts Legislature would have found the political will to reconcile its differences and enact H.R. 5830.


25 Id. §§ 10–48.

26 Id. § 23.

27 Id. §§ 27, 33.

28 Low-Level Radioactive Waste, supra note 5, at 5.
cess that, through detailed planning and screening and extensive public involvement, would establish credibility before any decisions were made; and (ii) allowing the local community to determine who would operate the facility and what the facility's technology would be.

III. Analysis

These two Acts, and others like them, make silent but fervent appeals to the principles of trust and consent held by their constituencies. For without constituency support, those responsible for carrying out the Acts' mandates lack political authority, and their chances of success are dim.

A. Implied Principles of Trust and Consent

Although principles of trust and consent usually go unstated, they can be elucidated with the help of a theory of culture and risk management developed by Steve Rayner with his colleague, Robin Cantor. Briefly stated, Rayner and Cantor's theory adopts the concept that social organizations can be grouped into three Weberian ideal types, with a fourth, residual category for individuals who are isolated from decisionmaking institutions. Their theory goes on to suggest that each type will have distinct cultural biases toward, among other things, issues of trust and consent. These types include:

1. The competitive-market type. Members of this type tend to trust successful individuals rather than organizations. They assume that


31 Steve Rayner has noted his intellectual indebtedness to others, particularly Mary Douglas for her work on cultural perceptions of risk and Douglas MacLean for his work on risk and consent. Telephone interview with Steve Rayner (November 16, 1987). See, e.g., M. DOUGLAS & A. WILDAVSKY, RISK AND CULTURE (1982); VALUES AT RISK (D. MacLean ed. 1986).
consent can be given implicitly, by preferences that are not stated expressly but are revealed through market decisions.

(2) The bureaucratic-hierarchical type. Members of this type tend to trust routine procedures and well-established organizations. They regard consent as something that can be assumed to have been given hypothetically, as part of a social contract between the citizen and the decisionmaking institution.

(3) The egalitarian type. Members of this type distrust both the market and the bureaucratic approaches. Instead, they tend to trust decisionmaking by consensus and to require explicit consent.

(4) The atomized-individual type. Members of this residual category include those who are controlled by the system but who have little say in it and are simply struggling for survival. They tend to trust the forces of luck, God, or nature and have no special consent principles.

Using this theory as an analytical tool, it becomes clear that an effort to serve two masters dominated the design of Chapter 21D. On the one hand, there was the market type (the developers); on the other, the egalitarian type (the host communities). The bureaucratic type (the Site Safety Council) was simply to mediate between the two. As one on-the-scene lawyer commented, “the idea of the Act was . . . to create a win-win situation for all parties. Companies would enjoy a streamlined approval process. Communities would be willing hosts. Citizens would appreciate negotiated benefits. Thus, the public would get needed storage, treatment, and disposal capacity to serve Massachusetts business.”

Obviously, Chapter 21D’s strategy for success didn’t work. Instead, as this lawyer went on to note, Chapter 21D disappointed practically everyone: businesses, cities and towns, and the public interest groups. Local officials criticized the siting process as not fair, and local citizens became distrustful and galvanized in opposition to proposed facilities. Meanwhile, waste management companies despaired of ever getting their facilities approved.

The Chapter 21D amendments proposed by Governor Dukakis, Senator Amick, and others have sought to turn failure into success by redirecting the Act’s appeals to underlying principles of trust and consent. By legitimizing and routinizing Chapter 21D’s institutional procedures, its appeals to principles held by the bureaucratic type

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32 McGregor, supra note 13, at 1.
33 Id. at 3.
34 See supra Section IIA for a discussion of these amendments.
would be strengthened. However, by taking some of the pressure to negotiate off the prospective host community and by giving greater local control over some key issues, its appeals to egalitarian principles would also be reinforced. This redirection switches Chapter 21D’s emphasis from a market/egalitarian approach with a relatively weak bureaucratic role to a bureaucratic/egalitarian approach with a relatively weak market role.

The proposed amendments to Chapter 21D thus seek to emulate the characteristics of the Low-Level Radioactive Waste Management Act. The latter Act, with its elaborate institutional procedures, emphasizes the development of trust in the government’s LLW management process. This trust enables, at key points in the process, the assumption of a tacit consent to decisions that are to be made at the state level. The Low-Level Radioactive Waste Management Act therefore makes a strong appeal to the principles held by the bureaucratic type. However, by providing for extensive public involvement in the process leading up to these centralized decisions and by allowing some important decisions to be made by the host community, it also makes a strong appeal to egalitarian principles.35

A not-too-hidden agenda lies behind Chapter 21D and the Low-Level Radioactive Waste Management Act. In each instance, the Act’s framers are groping for the best way to ensure implementation.

35 See supra note 23 for a discussion of the legislative history of the Low-Level Radioactive Waste Management Act. A key issue was whether the “Chapter 503 test” should be included in the Act. Nuclear Power and Waste Disposal Voter Approval and Legislative Certification Act, 1982 Mass. Acts 503 (codified at MASS. GEN. LAWS ANN. ch. 164 App., §§ 3-1 to -9 (West Supp. 1988)). Chapter 503 requires that no nuclear waste storage or disposal facilities can be constructed or operated in Massachusetts, and no interstate compact for nuclear waste storage or disposal can be entered into by the state, unless approval is given by majority vote in a statewide referendum and in both houses of the Legislature. See generally id. The originally proposed H.R. 5000 was extremely detailed but was silent on the Chapter 503 requirement. A Senate version of the bill (S. 1716, 1986 Leg. Sess.) was proposed with the Chapter 503 requirement explicitly included—partly in order to test its constitutionality. The Massachusetts Supreme Judicial Court found the voter approval process stipulated by Chapter 503 to be unconstitutional under the Massachusetts Constitution, on the grounds that the Legislature is prohibited from referring any act or resolve taken on its own initiative to the voters for their rejection or approval. Opinion of the Justices to the Senate, 397 Mass. 1201 (1986). The court also found unconstitutional the inclusion of the Chapter 503 test in the proposed Low-Level Radioactive Waste Management Act, because it encroaches on the power of the executive branch in violation of separation of powers principles set forth in the Massachusetts Declaration of Rights. Id. at 1208–10. For a discussion of the events leading up to the court’s opinion, see Colglazier & English, supra note 20. Although the constitutionality of the Chapter 503 test is now in doubt, it continues to be attractive to a number of people—partly because it appeals to their egalitarian principles. Chapter 503 does not necessarily weaken the Low-Level Radioactive Waste Management Act’s appeal to bureaucratic-hierarchical principles, but it could derail the waste facility siting process if those appeals are not successful.
And implementation is only possible if the Act is backed by political authority.

B. The Search for Political Authority

What counts as political authority? Endless debate surrounds this question, but two characteristics are generally recognized as essential to political authority. First, political authority is a codified or routinized form of power. And second, political authority requires some form of voluntary submission or consent.

The discussion that follows requires two other important distinctions about political authority. On the one hand, authority can be mistaken for external coercion, because both demand obedience. Authority is not external coercion, however. Instead, where external coercion is used, authority has failed. On the other hand, authority is not mere persuasion. Whereas persuasion presupposes equality, authority is hierarchical. And whereas persuasion works through argument, argument means that authority has been left in abeyance. Authority, then, is neither coercion by force nor persuasion by argument. Instead, authority relies on a shared sense of the rightness and legitimacy of the hierarchy itself, within which both the one who commands and the one who obeys have their own predetermined and stable places.

Many social philosophers contend that, for better or for worse, political authority has vanished from the modern world. To the extent that they are right, the demise of political authority bodes ill for hierarchical structures, which traditionally have relied on this authority to hold themselves intact and carry out their functions. Put another way, bureaucratic groups can no longer take for granted public recognition of their legitimacy and the consent of their constituents. This has important ramifications for the three organizational types discussed above. To understand these ramifications, one must first understand the inter-group dynamics of the three types.

The bureaucratic-hierarchical type, especially as it is represented by public institutions, sees itself and is seen by others as a mediator among the interests of all four types—those of the competitive-market type, the egalitarian type, and the atomized-individual type,

36 I am indebted to the philosopher Hannah Arendt for these distinctions. See generally H. ARENDT, What is Authority?, in BETWEEN PAST AND FUTURE 91–141 (1968).

37 This point is similar to one made by H.L.A. Hart in his discussion of the internal view of law and the “rule of recognition” in H.L.A. HART, THE CONCEPT OF LAW 79–107 (1961).

38 See, e.g., H. ARENDT, ON VIOLENCE (1970); R. NISBET, TWILIGHT OF AUTHORITY (1975).
as well as its own. The bureaucratic type is therefore distinguished from the others. Whereas this type is primarily committed to the concept of process and attempts, and is expected to attempt, to incorporate the others into its process or at least take their interests into account, the other three types are primarily interested in outcomes and the effects of those outcomes on their own interests. 39

The bureaucratic type is thus a focal point in the interactions of the four types. Through the legislative process, all four types give the bureaucratic type the responsibility and legal authority to mediate their interactions. They are especially likely to give this responsibility and authority in situations that require institutional management, such as risk management situations. 40 Nevertheless, political authority—authority that is backed by the consent of the governed—does not necessarily accompany legal authority. And without political authority, the bureaucratic group may (must?) then rely instead upon devices that are used by the group types conferring the legal authority.

These devices may take the form of marketplace mechanisms or egalitarian consensus-seeking, and they all are rooted in a shifting blend of persuasion and coercion. For persuasion and coercion are the tools used by the other two powerful groups, the market and egalitarian groups, in their internal and external relationships. Persuasion is their first resort, but both may turn to coercion if persuasion fails. 41

When thinking about coercion and persuasion, a number of hard questions come to mind. What counts as coercion? What counts as persuasion? When does persuasion become coercion? The line between the two can be surprisingly thin. For example, it is difficult to say whether Chapter 21D's refusal to give potential host communities the power to veto hazardous waste facilities was coercion. The potential host communities apparently thought that it was. It is also difficult to say whether the Act's requirement of a dialogue between facility developers and prospective host communities was a

39 The egalitarian type and to a lesser extent the market type may also be concerned about the interests of atomized individuals, who are struggling simply to survive.
40 See infra Section IV for a discussion of changing institutional approaches to chemically hazardous and radioactive waste management.
41 Unlike the market group, the egalitarian group would use coercion only on outsiders, not on insiders, since coercion is antithetical to the egalitarian's strong preference for a like-minded group. But, paradoxically, if a person is not like-minded and cannot be persuaded to agree, then he or she disqualifies themself as a member of the group and becomes a justifiable target for coercion.
form of persuasion. The communities thought that it was not, or that it was manipulative persuasion.

When Chapter 21D was passed, the prohibition of local vetoes appeared to be a reasonable exercise of state power, and the requirement of local negotiations appeared to be suitable inducements to prompt communities to define their terms of acceptance. Nevertheless, both the prohibition of local vetoes and the mandated negotiations were received by the prospective host communities as an unpalatable blend of coercion and persuasion. They had to accept the facility, and they had to negotiate an agreement.

The prospective host communities' reactions to Chapter 21D suggest that, paradoxically, market and egalitarian groups may regard the tools of coercion and persuasion suspiciously when they are wielded by a public agency, even though these groups continue to regard their own use of coercion and persuasion as legitimate. And to the extent that the market and egalitarian groups do regard suspiciously the bureaucratic group's use of these tools, they have another reason, beyond their innate suspicion of the bureaucratic type, to withdraw the political authority that they had vested in that type. In other words, they have yet another reason not to trust in and not to consent to bureaucratic processes. But, until legal authority is withdrawn as well, the bureaucratic group's responsibilities have not ended.

The problem for bureaucracy, then, becomes one of how to regain trust and consent, reestablish political authority, and avoid extensive—and perhaps futile—reliance on either persuasion or coercion as the main underpinnings of the bureaucratic process. The Low-Level Radioactive Waste Management Act and the proposed amendments to Chapter 21D are attempts to reverse the spiral away from political authority. It remains to be seen whether they will succeed.

IV. CONCLUSION

Like the amendments to Chapter 21D proposed by Senator Amick, the Low-Level Radioactive Waste Management Act stresses bureaucratic and egalitarian values over market values, but it does so more extensively and forcefully. There is a good historical reason for this difference. Traditionally, hazardous waste management has been a market-initiated, private responsibility, whereas in 1980, low-level radioactive waste management became by law a public responsibility.

But the private responsibility/public responsibility distinction between hazardous chemical waste and low-level radioactive waste will
diminish with implementation of the “Superfund Amendments,” which require states to begin taking responsibility for hazardous chemical waste generated within their borders.\footnote{Superfund Amendments and Reauthorization Act of 1986 § 104(k), 42 U.S.C. § 9604 (1982 and Supp. IV 1986).} And, apart from legal distinctions, both public and governmental attitudes toward hazardous chemical waste have shifted. The public increasingly has expressed an interest in the safe management of hazardous chemical waste, and the states increasingly have assumed an initiatory rather than a solely regulatory role.

In addition, with communities' objections to hosting hazardous waste facilities, states have begun to intervene. Consequently, hazardous chemical waste, like radioactive waste, is beginning to be seen as a risk that requires public management. The more radical revisions to Chapter 21D proposed by Governor Dukakis reflect this shift.

Does risk management by a public institution necessarily mean a strong appeal to bureaucratic principles? No. But the two Massachusetts Acts discussed here suggest that appeals to bureaucratic principles may be adopted as a fall-back position if appeals made primarily to market and egalitarian principles don't work. By making the bureaucratic group more central to the siting process and by expanding that process to include related risk management concerns, an attempt is being made to reestablish (or establish for the first time) an elusive but crucial prerequisite for any risk management process: the political authority to implement process.