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Should Maine Ship Its Low-Level Radioactive Waste to Texas? A Critical Look at the Texas Low-Level Radioactive Waste Disposal Compact

Maxwell Branson
University of Maine School of Law

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I. INTRODUCTION

The Texas Low-Level Radioactive Waste Disposal Compact is an agreement, made at the behest of federal legislation and currently awaiting ratification by the United States Congress, that would allow Maine and Vermont to ship low-level radioactive waste to the state of Texas, where it would be disposed of in a facility to be constructed near the small town of Sierra Blanca.[1] The problem of finding a place to put the low-level radioactive waste generated by nuclear power plants, hospitals and industries has plagued the nation since at least the seventies, and one might argue that it has been a problem since radioactive material was discovered at the end of the nineteenth century.[2] While the Texas Compact represents a long-awaited solution to the problem of finding a place to put Maine's low-level radioactive waste, it also presents some problems of which Mainers should be aware. For example, the ultimate destination of this low-level radioactive waste, Sierra Blanca, is a poor community made up primarily of Hispanic and Native-American farmworkers. Many critics of the Texas Compact charge that this area was chosen for the construction of the disposal facility because the population had no political power or money with which to offer any resistance to the decision. This decision, they argue, was an example of "environmental racism."[3]

The existence of low-level radioactive waste and the need for its safe disposal is a serious problem that the nation must come to grips with in the very near future. With the recent problems threatening to close Maine Yankee, Maine's only nuclear power plant, the problems presented by low-level radioactive waste may soon become especially acute here in Maine. Should Maine Yankee suffer any serious accidents, or be forced to shut down before its license expires, Maine would immediately be faced with vast amounts of potentially dangerous waste that would have to be disposed of safely and responsibly. Since the Texas Compact has not yet been voted

1. *See infra* Part III.B.

2. *See* Michael E. Burns & William H. Briner, *Setting the Stage, in* LOW-LEVEL RADIOACTIVE WASTE REGULATION: SCIENCE, POLITICS AND FEAR 1, 5-6 (Michael E. Burns ed., 1988) [hereinafter LOW-LEVEL RADIOACTIVE WASTE REGULATION].

3. *See infra* notes 341-49 and accompanying text.

into law by Congress, Maine is not assured that a disposal facility would be available if such a situation arose in the near future. The recent difficulties at Maine Yankee, coupled with the controversy surrounding the Texas Compact itself, make low-level radioactive waste disposal a very relevant and topical issue in Maine.[4]

This Comment analyzes the Texas Compact from Maine's point of view, asking whether Maine can accept the Compact as a solution to its low-level radioactive waste disposal problem. Another purpose of this Comment is to provide a history of the nation's policy and Maine's policy with respect to its low-level radioactive waste, so that readers have an adequate frame of reference by which to judge the Texas Compact. The Comment begins by discussing low-level radioactive waste itself, what it is, and where it comes from. The Comment then briefly discusses the history of low-level radioactive waste disposal in the United States, and the federal low-level waste legislation that is in effect today. Next, the Comment traces the events that led to the adoption of the Texas Compact by Maine and discusses the problems that have kept the Compact from being approved by Congress. The Comment concludes by attempting to answer the question whether any changes to the Texas Compact are necessary before it can be approved by Congress or, perhaps more importantly, before it can be accepted by Mainers.

II. BACKGROUND

A. *Low-Level Radioactive Waste*

Radioactive waste is a term that applies to a wide variety of material that may differ greatly in chemical and radioactive composition. Because it is generated in diverse forms, radioactive waste is traditionally defined by its source rather than its physical characteristics.[5] Historically, most radioactive waste generated in the United States has resulted from the production of nuclear weapons,[6] but radioactive waste is also generated by a wide variety of other activities, many of which are vitally important to our society.

It is important at the outset to distinguish between high-level radioactive waste (HLRW) and low-level radioactive waste (LLRW), since confusion between the two classifications has often led to misunderstanding in important policy decisions.[7] HLRW is generated primarily during the reprocessing of spent reactor fuel in nuclear

4. *See infra* notes 16 and 18.

5. *See* EDWARD L. GERSHEY ET AL., LOW-LEVEL RADIOACTIVE WASTE: FROM CRADLE TO GRAVE 1 (1990).

6. *See id.*

7. *See* DONALD L. BARLETT & JAMES B. STEELE, FOREVERMORE: NUCLEAR WASTE IN AMERICA 214-15 (1985); Jorge Contreras, *In the Village Square: Risk Misperception and Decisionmaking in the Regulation of Low-Level Radioactive Waste*, 19 ECOLOGY L.Q. 481, 502 (1992); Timothy L. Peckinpaugh, *The Politics of Low-*

power plants,[8] and is concentrated in low volumes with high radioactivity.[9] In 1983, the federal government agreed to dispose of the HLRW produced by civilian nuclear power plants.[10] The Nuclear Waste Policy Act of 1982 required the Department of Energy (DOE) to select and construct one or more sites for the disposal of the growing accumulation of stored HLRW, but because of the inevitable problems with siting a waste disposal facility, that goal has not yet been accomplished.[11] Similar problems have been encountered in the effort to site LLRW disposal facilities.

LLRW accounts for eighty-five percent of the volume of radioactive waste generated in the United States, but it represents only one percent of the total radioactivity of that waste.[12] It is inherently less dangerous than HLRW, requiring only marginal shielding to be safely stored or disposed, and it will decay very rapidly relative to HLRW.[13] LLRW consists of a wide variety of materials such as sludge and filters from nuclear power plants, contaminated laboratory equipment and unused reagents from hospitals, protective clothing and equipment, and wastes from the production of such consumer goods as smoke detectors, luminous watch dials, and illuminated signs.[14]

Of the variety of sources of commercial LLRW in the United States, nuclear power plants are certainly the most prolific genera-

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Level Radioactive Waste Disposal, in LOW-LEVEL RADIOACTIVE WASTE REGULATION, *supra* note 2, at 45, 45.

8. *See* GERSHEY ET AL., *supra* note 5, at 4.

9. *See id.* at 3.

10. *See* Matthew L. Wald, *U.S. Says It Cannot Meet Goal for Nuclear-Waste Disposal*, N.Y. TIMES, Feb. 6, 1997, at A14. *See also* 42 U.S.C. § 10131 (1994). A great deal of HLRW is also produced by the Department of Energy and national defense projects, and much of it is currently stored by the federal government in facilities such as the Savannah River Plant in South Carolina, the Idaho National Engineering Laboratory in Idaho, and the Hanford Reservation in Washington. *See* GERSHEY ET AL., *supra* note 5, at 4.

11. *See* GERSHEY ET AL., *supra* note 5, at 7. The Department of Energy first considered locating a disposal site near Lyons, Kansas. But, "[a]fter much politicking," it changed its mind and began to investigate sites near Yucca Mountain in Nevada. *Id. See* 42 U.S.C. § 10172 (1994). Currently, there is no federal facility for the disposal of HLRW, and consequently, generators have been forced to store HLRW well beyond their reasonable capacity. *See* Wald, *supra* note 10. The Yucca Mountain site is still a possibility, but experts have recently estimated that the site will not be ready until 2010. *See id.* One proposal has called for a temporary storage site ("essentially a fenced-off parking lot for massive storage casks") to be established during the interim, but the Clinton administration opposes this course of action, believing that it will just delay the opening of a permanent site. *See id.*

12. *See* GERSHEY ET AL., *supra* note 5, at 12.

13. *See* Peckinpaugh, *supra* note 7, at 46.

14. *See generally* GERSHEY ET AL., *supra* note 5 at 20-25; Michael J. Welch et al., *Low-Level Radioactive Waste at University Medical Centers, in* LOW-LEVEL RADIOACTIVE WASTE REGULATION, *supra* note 2, at 109, 112; Contreras, *supra* note 7, at 486-87.

tors.[15] For example, Maine Yankee, a nuclear power plant located in Wiscasset, Maine, has annually generated over ninety percent of Maine's waste.[16] One important consideration for the future of LLRW disposal is that, as of 1990, there were over one hundred nuclear power plants in the United States, virtually all of which were built in the sixties and seventies and designed for an active life of thirty to forty years.[17] Maine Yankee, for example, is scheduled to shut down or "decommission" in 2008.[18] Decommissioning a nuclear power plant generates vast amounts of LLRW (consisting of the actual equipment, body, and structure of the plant itself) that will consume a large amount of disposal space.[19] Therefore, decom-

15. *See* Contreras, *supra* note 7, at 486.

16. *See* BARLETT & STEELE, *supra* note 7, at 212-13. Maine produced about 12,000 cubic feet of LLRW per year during the eighties, which accounted for less than two percent of the waste produced in New England and less than one percent of the waste produced in the nation each year. *See* P.L. 1985, ch. 493, § 1. More recently, Maine has produced about 6,000 cubic feet of LLRW per year. *See Deep in the Heart of Texas: New LLW Compact Options*, NUCLEAR WASTE NEWS, Apr. 22, 1993, *available in* 1993 WL 2753928. Maine Yankee, constructed at a cost of about $231 million, began operation in December 1972. *See* Joseph Pereira, *In Maine Vote, Rising Unease May Shut Nuclear Plant*, WALL ST. J., Sept. 23, 1987, *available in* 1987 WL-WSJ 303360. Since then, Maine Yankee has been beset with a multitude of problems. In 1980, 1982, and 1987 serious challenges were mounted against the plant culminating each time in statewide referendums, but in all three cases the voters of Maine have allowed Maine Yankee to continue operations. *See* Marc Sperber, *Maine Voters Defeat Referendum to Close Maine Yankee by 58% - 42%*, NUCLEONICS WK., Nov. 5, 1987, at 2, *available in* 1987 WL 2114528. The plant's safety has again been called into question after shutdowns in 1995 resulting from a short in the electrical generator and tests finding half the plant's steam generator tubes were cracking. *See* Tux Turkel, *The Power of TV to Mixed Reviews, Maine Yankee Takes to the Air to Counter Recent Reports of Problems at its Nuclear-Power Plant*, PORTLAND PRESS HERALD, Sept. 15, 1996, at 1F, *available in* 1996 WL 11240974. In addition, workers and visitors to the plant have been exposed to radiation, allegations of mishandling nuclear fuel have been made, and studies have found the plant's records of safety requirements and required reports have not been handled properly. *See id.* As of this writing, Maine Yankee continues to be shut down under a confirmatory action letter from the Nuclear Regulatory Commission prohibiting it from reopening until it fulfills certain agreements. *See* David Stellfox, *Opponents Seek Plant Closure as Maine / Entergy Negotiate Contract*, NUCLEONICS WK., Jan. 30, 1997, at 12, *available in* 1997 WL 8870238. Thus, a shutdown that was expected to last weeks has stretched into months after the initial problem with "cable separation issues" was compounded by the discovery of leaking fuel rods. *See id.* With the resulting resurgence of opposition to the plant again becoming a major issue, LLRW disposal problems in Maine take on a more menacing appearance.

17. *See* GERSHEY ET AL., *supra* note 5, at 20.

18. *See* Stellfox, *supra* note 16. Although Maine Yankee's license doesn't expire until 2008, a citizen's group calling itself "Cheaper, Safer Power," reacting to the problems discussed *supra* note 16, is seeking to permanently close the plant on January 1, 2000. *See id.* Of course, if their plan is successful, it will cause LLRW disposal planners substantial worry.

19. *See* Contreras, *supra* note 7, at 486.

missioning presents important planning problems.[20] The remainder of the LLRW produced in Maine is generated by biomedical researchers and other institutional facilities, and the Portsmouth-Kittery Naval Shipyard industrial facility.[21]

While LLRW is certainly not as dangerous as HLRW, there is much debate concerning the exact level of risk from exposure to LLRW. Exposure to radiation causes two types of damage to human tissue: "somatic" damage, which usually appears as cancer, and genetic damage.[22] Because these types of injury take years to appear, or even generations in the case of genetic damage, there is an inherent difficulty in tracing particular manifestations of radiation damage to specific exposures.[23] The Nuclear Regulatory Commission (NRC) has adopted the "linear, no-threshold model," which assumes a proportional relationship between health risk and radiation exposure, leading to the conclusion that there is no safe level of exposure.[24] Yet as inhabitants of this planet, all of us are exposed to radiation every day; normal background radiation in the environment originates from cosmic rays emanating from outer space, terrestrial radiation from radionuclides in the soil, and radionuclides naturally occurring in the human body.[25] The estimated risk of fatal cancer from this naturally occurring background radiation in the environment is about thirty-six times higher than the risk of fatal cancer from continued exposure to a properly operating LLRW disposal site.[26] Indeed, the risk of fatal exposure from a properly

20. The three methods by which decommissioning waste may be handled include "prompt dismantlement," "entombment," and the "safestore" method. *See* MAINE LOW-LEVEL RADIOACTIVE WASTE AUTHORITY, TOWARD A BETTER UNDERSTANDING . . . MAINE'S LOW-LEVEL RADIOACTIVE WASTE 8 (1991) [hereinafter TOWARD A BETTER UNDERSTANDING]. Prompt dismantlement involves removing and transporting the radioactive components of the power plant to disposal facilities shortly after the power plant has ceased operation; officials plan to use the prompt dismantlement method to dispose of the decommissioning waste that will be generated when Maine Yankee shuts down in 2008. *See id.* The other two methods by which decommissioning waste can be disposed are entombment, in which the containment building of the power plant is simply filled with concrete, sealing it from the environment, and the safestore method, in which the decommissioning waste is sealed from the environment for a period of up to 60 years, allowing the radioactive material to decay to less dangerous levels before ultimately being dismantled and shipped to a disposal facility. *See id.*

21. *See* P.L. 1985, ch. 493, § 1. In 1989, the Maine generators of LLRW requiring a license to dispose of their waste were: Bates College, Bigelow Laboratory, FMC Marine Colloids, Foundation for Blood Research, Idexx Corp., Jackson Laboratory, Lincoln Pulp & Paper, Mt. Desert Bio-Laboratory, Portsmouth-Kittery Naval Shipyard, University of Maine, Ventrex Lab, Inc. and, of course, Maine Yankee. *See* TOWARD A BETTER UNDERSTANDING, *supra* note 20, at 6.

22. *See* Contreras, *supra* note 7, at 491.

23. *See id.* at 491-92.

24. *See id.* at 492.

25. *See* GERSHEY ET AL., *supra* note 5, at 146.

26. *See* Contreras, *supra* note 7, at 497.

operating disposal facility is small when compared with the risks of death from activities we take for granted, such as driving a car or swimming.[27]

Yet, as a society, we have been adamantly opposed to the proposed siting of a LLRW facility near our homes or in our state, even though such a location would put us at a very small risk.[28] The fear of atomic energy arose generally in the public's mind in the beginning years of the Cold War following World War II,[29] and the fear of radioactive waste soon followed in the late sixties.[30] Many factors contributed to the public's growing fear of radioactive waste. One factor was the growing distrust of the federal government to properly handle the waste.[31] Another was the media's extensive coverage and exaggeration of the risks from radioactive waste.[32] And certainly another was the public's deep-seated fear of anything connected with radiation, especially radioactive waste.[33] The fact remains that we as a society have chosen to incur huge costs to minimize the relatively small danger of injury from exposure to LLRW.[34] This Comment takes the position that while properly run LLRW disposal facilities should present few health or safety risks to its neighbors, those neighbors must be treated with openness and

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27. *See id.* at 498.

28. LLRW disposal facilities have shown all the classic characteristics of LULUs ("locally undesirable land uses") and NIMBYs ("not in my backyard"). *See id.* at 535-36. For a discussion of LLRW disposal facilities as NIMBYs and of NIMBYs in general, see ORLANDO E. DELOGU, MAINE LAND USE CONTROL LAW: CASES, NOTES, COMMENTS (2d ed. forthcoming 1997) (manuscript at ch. 10, on file with author).

29. *See* Burns & Briner, *supra* note 2, at 27-28. Burns and Briner attribute some of the fear of atomic energy during this period to the public's realization of the horrors of a future war involving nuclear weapons. *See id.*

30. *See* Contreras, *supra* note 7, at 499.

31. *See id.* at 500. In addition to federal government mishandling of radioactive waste and accidents at federal disposal sites, "[p]ublic confidence in the Atomic Energy Commission was shaken after it appeared that the agency had covered up the dangers of fallout from nuclear weapons testing." *Id.*

32. *See id.* at 500-01.

33. *See id.* at 503. By 1974, surveys indicated that 52% of Americans considered radioactive waste management "a serious problem." *Id.* There are many factors that can account for this fear of radiation. First, the damages that can result from exposure to radiation, cancer and genetic mutation, are generally dreaded in today's society. *See id.* Second, the collective mind of the public usually associates radiation and radioactive waste with "nuclear war and disasters of immense proportions." *Id.* Third, radiation is a "public risk" that we, as individuals, feel we have no control over. *Id.* at 504. Finally, the risks inherent in exposure to radiation are still relatively unknown and the idea that radiation is invisible and that one may be exposed and yet not manifest symptoms of any injury for years is particularly frightening. *See id.*

34. *See id.* at 498-99. For example, small relatively harmless leaks of radioactivity from LLRW disposal sites have stirred up political pressure to impose safety regulations that have driven up the cost of facilities themselves from about $10 million to about $60 million. *See id.* at 498.

respect by planners who propose to site a disposal facility in the "backyard" of the neighborhood. As noted, the major reasons for the "not in my backyard" (NIMBY) problems with LLRW disposal facilities are misunderstanding, mistrust, and lack of information. By sharing information and opening up the process to the public, planners will have a greater incentive to act responsibly and safely, and perhaps a greater trust between the public and planners will be the result.

B. Disposal Before the Federal Low-Level Radioactive Waste Policy Act of 1980

1. 1962-1979: The Rise and Fall of Commercial Siting

While before 1960 most commercial LLRW was simply dumped into the ocean,[35] by 1962 the Atomic Energy Commission (AEC)[36] was willing to allow private companies to develop commercial facilities for the disposal of LLRW using a technique known as "shallow land burial" (SLB).[37] The AEC thus announced a policy that envisioned establishing regional commercial sites "as needed" throughout the nation.[38] At this time, the volume of LLRW produced in the nation was rapidly increasing,[39] and several companies quickly submitted their applications, hoping to be granted a share of the captive

35. *See* Burns & Briner, *supra* note 2, at 30. Commercial generators of LLRW were allowed to dispose of their waste in the ocean from 1946 to 1970, but a moratorium on the issuance of new licenses for ocean-dumping was imposed in 1960. *See* Amelia Ann Hagen, *History of Low-Level Radioactive Waste Disposal in the Sea, in* RADIOACTIVE WASTES AND THE OCEAN 47, 51 (P. Kilho Park et al. eds., 1983). The majority of waste was deposited into the sea from 1946 to 1962 at four major sites. Two sites were located off the coast of Sandy Hook, New Jersey, and the others were located in Massachusetts Bay and off the coast of San Francisco, California. *See id.* at 49.

36. The AEC was created by the Atomic Energy Act of 1946, Pub. L. No. 585, 60 Stat. 755, 756 (1946) (codified as amended at 42 U.S.C. §§ 2011-2297 (1994)). The policy of this Act was that, "subject at all times to the paramount objective of assuring the common defense and security, the development and utilization of atomic energy shall, so far as practicable, be directed toward improving the public welfare, increasing the standard of living, strengthening free competition in private enterprise, and promoting world peace." *Id.* § 1(a), at 756. The AEC was abolished in 1975 and replaced by the Energy Research and Development Administration, *see* 42 U.S.C. § 5811 (1994), and the NRC. *See id.* § 5841.

37. *See* GERSHEY ET AL., *supra* note 5, at 47. "Shallow land burial consists of excavating a trench or vault, emplacing the waste, minimizing void space within the disposal unit, and covering the waste with earth to control access to the waste." D.G. Jacobs & R.R. Rose, *Shallow Land Burial of Radioactive Wastes, in* MANAGEMENT OF RADIOACTIVE MATERIALS AND WASTES: ISSUES AND PROGRESS 54, 54 (Shyamal K. Majumdar & E. Willard Miller eds., 1985) [hereinafter MANAGEMENT OF RADIOACTIVE MATERIALS AND WASTES].

38. *See* BARLETT & STEELE, *supra* note 7, at 198.

39. *See* GERSHEY ET AL., *supra* note 5, at 47.

market in LLRW disposal.[40] The sites themselves were to be owned by the individual states, operated by the licensed company, and subject to federal or "agreement state" regulations.[41]

The first commercial site for disposal of LLRW in the United States opened in 1962 in Beatty, Nevada.[42] The second was opened in 1963 in Maxey Flats, Kentucky.[43] From 1963 to 1971, four more commercial sites opened across the country: in West Valley, New York (1963), Richland, Washington (1965), Sheffield, Illinois (1967), and Barnwell, South Carolina (1971).[44] In contrast to the AEC's 1960 policy statement, the sites were not established "as needed" on a regional basis; actually, very little thought was given during the licensing process to the suitability of the locations or the regional needs for facilities.[45] Site selection and development was completely in the hands of the private businesses who ran them,[46] and there was little regulation or performance criteria involved in the licensing process.[47] Indeed, the first standards concerning the method of disposal at commercial sites did not exist until promulgation in 1981.[48] All six sites used SLB based on the technology that was used at federal LLRW disposal facilities, technology which the federal government had claimed was "perfected."[49] But there was no independent monitoring of federal facilities, and although the

40. *See id.* The companies that had acted as brokers in the ocean-dumping process by taking the LLRW from generators, packaging it, and shipping it out to sea recognized a lucrative enterprise created by the AEC licensing process. *See id.* Because safe disposal was a necessity for LLRW generators, and because qualified operators willing to accept such waste were scarce, simple economics promised substantial return for investment in a LLRW disposal facility.

41. *See* Burns & Briner, *supra* note 2, at 39. Amendments to the Atomic Energy Act allowed some states ("agreement states") to implement their own radiation protection programs, provided that the programs were found to be at least as stringent as the federal legislation. *See* 42 U.S.C. § 2021(d) (1994); Burns & Briner, *supra* note 2, at 39. As for the six states in which commercial sites would soon open, five had "agreement state" status, and their sites were licensed through the state. The site that would open in Illinois would be licensed directly by the AEC. *See* MARY R. ENGLISH, SITING LOW-LEVEL RADIOACTIVE WASTE DISPOSAL FACILITIES 6 (1992).

42. *See* GERSHEY ET AL., *supra* note 5, at 47.

43. *See* Burns & Briner, *supra* note 2, at 39.

44. *See* BARLETT & STEELE, *supra* note 7, at 199.

45. *See id.*

46. *See id.*

47. *See* GERSHEY ET AL., *supra* note 5, at 47.

48. *See id. See also* Licensing Requirements for Land Disposal of Radioactive Waste, 10 CFR § 61 (1997) (current standards).

49. *See* BARLETT & STEELE, *supra* note 7, at 199. LLRW that was generated by the federal government had been disposed of by SLB at federal installations. *See id.* at 198. During the Manhattan Project in the thirties and forties federal disposal facilities for government-generated LLRW were established at Hanford, Washington; Idaho Falls, Idaho; Los Alamos, New Mexico; Oak Ridge, Tennessee; and Savannah River, South Carolina. *See* Burns & Briner, *supra* note 2, at 29.

public "could only assume that all were successful," the truth was, they were not.[50]

By 1978, three out of the six commercial sites that had opened between 1962 and 1971 had closed, and the other three were threatening to close.[51] The problems at the sites that closed in the seventies were primarily with water management. The West Valley site experienced years of difficulty with groundwater accumulation in the trenches, massive erosion, and minor migrations of radioactive material. The site finally gave in to political pressure by closing in 1975.[52] The Maxey Flats site experienced large-scale subsidence of the trenches as well as problems with accumulation of water and erosion almost identical to those of West Valley.[53] When state officials found local groundwater infected with radioactive leachate, Kentucky cancelled the site's lease in 1977 and the Maxey Flats site was forced to close.[54] The Sheffield site closed in 1978 when the NRC failed to grant site operators a permit to expand before its disposal capacity was exhausted.[55] Before closing, the Sheffield site experienced its own problems with erosion, subsidence, and migration of radioactive leachate.[56] The problems experienced by the three sites that closed emphatically demonstrated that "water is the major enemy to be avoided in future site operations."[57] Since the sites closed, remedial actions have been necessary to restabilize trenches and mitigate water accumulation problems. Despite these measures, drainage continues to be a problem that requires constant monitoring.[58]

2. *1979: The Disposal Crisis*

It is important to note that the West Valley, Maxey Flats, and Sheffield sites closed at a time when commercial LLRW production

50. *See* BARLETT & STEELE, *supra* note 7, at 199. *See generally* RONNIE D. LIPSCHUTZ, RADIOACTIVE WASTE: POLITICS, TECHNOLOGY, AND RISK 129 (1980) (describing the haphazard disposal procedures at the National Reactor Testing Station in Idaho Falls).

51. *See* Burns & Briner, *supra* note 2, at 40.

52. *See* GERSHEY ET AL., *supra* note 5, at 52. *See generally* John M. Matuszek, *Safer Than Sleeping with Your Spouse—The West Valley Experience, in* LOW-LEVEL RADIOACTIVE WASTE REGULATION, *supra* note 2, at 261 (analyzing the West Valley failure).

53. *See* Ralph DiSibio, *Operation of a Low-Level Waste Disposal Facility and How to Prevent Problems in Future Facilities, in* MANAGEMENT OF RADIOACTIVE MATERIALS AND WASTES, *supra* note 37, at 137, 139.

54. *See* GERSHEY ET AL., *supra* note 5, at 49.

55. *See id.* at 54.

56. *See id.* at 54-55.

57. DiSibio, *supra* note 53, at 139.

58. *See* GERSHEY ET AL., *supra* note 5, at 55.

was soaring.[59] With those three sites closed, the three remaining "sited" states began to feel the burden of responsibility for the entire nation's LLRW.[60] None of the three wanted to become permanent repositories for the United States' LLRW,[61] and all of the three would attempt measures to either limit or entirely cut off the waste they were required to accept from other states.[62] This situation resulted in a crisis in the fall of 1979 when two of the sited states had temporarily closed their facilities, and the third had reduced by half the volume of waste it was willing to accept.[63]

Just as Washington, Nevada, and South Carolina became aware that they were the only LLRW disposal sites left open in the United States, their options were suddenly limited by an important 1978 Supreme Court decision. In *Philadelphia v. New Jersey*[64] several New Jersey landfill operators and the out-of-state cities with which they contracted brought an action against the State of New Jersey challenging a statute prohibiting the importation of most solid or liquid waste that was generated or collected outside of New Jersey's borders.[65] Justice Stewart, writing for the majority, first established that the interstate movement of wastes was "commerce" governed by the Commerce Clause of the United States Constitution.[66] The Court assumed that New Jersey had the right to "reduce the waste disposal costs of New Jersey residents or to save remaining open lands from pollution,"[67] but then held that the New Jersey statute violated the Commerce Clause because it employed improper means to achieve those goals.[68] The State made no showing that out-of-state waste was any more harmful than in-state waste.[69] Therefore, the Court viewed the statute as a protectionist measure that sought to isolate the state from the nation's waste disposal problem.[70] New Jersey could not solve its waste disposal problem by discriminating against articles of commerce in violation of the Constitution.[71] Thus, the three sited states faced a dilemma: They could either place limits on the amount of LLRW (in-state *and* out-

59. *See* BARLETT & STEELE, *supra* note 7, at 201. From 1975 to 1978, the volume of waste disposed at the commercial facilities increased by 60%. *See id.*

60. *See* Michael E. Petrella, *Wasting Away Again: Facing the Low-Level Radioactive Waste Debacle in the United States,* 5 FORDHAM ENVTL. L.J. 103, 112 (1993).

61. *See* Deborah M. Mostaghel, *The Low-Level Radioactive Waste Policy Amendments Act: An Overview,* 43 DEPAUL L. REV. 379, 385 (1994).

62. *See* BARLETT & STEELE, *supra* note 7, at 201-03.

63. *See id.* at 203.

64. 437 U.S. 617 (1978).

65. *See id.* at 618-19.

66. *See id.* at 622-23.

67. *Id.* at 626.

68. *See id.* at 629.

69. *See id.*

70. *See id.*

71. *See id.* at 626-27.

of-state) that their facilities would accept or simply close the facilities to *all* waste.[72] Under either option the states would lose capacity to dispose of *their own* LLRW. Alternatively, they could go on accepting without limit the LLRW generated by the entire nation. In the eyes of Washington, Nevada, and South Carolina, none of these choices were acceptable.

The sited states experienced technical difficulties of their own, but those difficulties were largely confined to problems with management, packaging, and transportation.[73] Because the sited states were adamantly opposed to the situation in which they had been placed, and because each was anxious to make the point that it was unwilling to accept permanent responsibility for the nation's LLRW disposal,[74] the governors of the sited states often reacted to these technical difficulties by temporarily closing their disposal facilities.[75] These reactions led to a "crisis" in 1979 when the Richland and Beatty sites had closed temporarily, and the governor of South Carolina had announced that the Barnwell site, the only site left in the nation willing to accept LLRW, would reduce the amount of LLRW it would accept by fifty percent over the next two years.[76] During this period, generators and brokers who made their living hauling waste to disposal facilities were forced to store LLRW in hospitals, research labs, power plants, and warehouses, often well beyond the duration allowed by NRC regulations.[77] It was this "crisis" that would lead to the enactment of federal legislation designed to rem-

72. The Court theorized that New Jersey could have taken a similar tack. The Court noted that a state, in order to protect its environment or the health, safety, and general welfare of its citizens, may regulate the total amount of waste its facilities could accept if it does not discriminate based on where the waste was generated. *See id.* at 626-27.

73. The Richland and Beatty sites were not likely to experience problems with water management because they were located in arid regions of the country. *See* GERSHEY ET AL., *supra* note 5, at 59. Likewise, the Barnwell site managed to avoid water problems because the porous soil underlying the burial trenches allowed water to simply drain out. *See id.* at 56. But one cannot discount the importance of the fact that Barnwell was the last site to open, and its operators learned a great deal from the mistakes of other sites. *See* ENGLISH, *supra* note 41, at 7.

74. *See, e.g.,* GERSHEY ET AL., *supra* note 5, at 57. For example, after the Three Mile Island incident in 1979, South Carolina's governor refused to allow the Barnwell site to accept any of the waste generated by the accident. *See id.* Nevada's governor also objected to waste from Three Mile Island being shipped to his state, telling local reporters that if the waste was liquid, "the people responsible for it can drink it." BARLETT & STEELE, *supra* note 7, at 202.

75. For example, the Beatty site closed several times in 1979: first when workers were discovered to be removing contaminated tools from the site, *see* GERSHEY ET AL., *supra* note 5, at 60; LIPSCHUTZ, *supra* note 50, at 134, and subsequently when a truck hauling waste was found leaking and several barrels of LLRW were found some distance away from the trench in which they were supposed to have been buried. *See* BARLETT & STEELE, *supra* note 7, at 201.

76. *See* BARLETT & STEELE, *supra* note 7, at 202-03.

77. *See id.* at 203-05.

edy the situation of the three sited states, all of which had been threatening angrily to close their facilities permanently unless something was done.

3. *1980: Solution*

The actions of the three sited states in 1979 finally focused the nation's attention on the LLRW disposal shortage in the United States, and the federal government realized that something had to be done. The question was one of remedy. The government was faced with the choice of whether to take over responsibility for disposing of the nation's LLRW itself or to give that responsibility to the states. A few years earlier, several studies had concluded that the disposal of LLRW could be better solved on a national basis and recommended that the federal government assume control of the siting process.[78] The sited states, however, were adamantly opposed to the federal government asserting jurisdiction over LLRW disposal.[79] The sited states feared that if the federal government took over, they would lose what little control they had over the disposal facilities in their states, and they suspected that the federal government would choose simply to maintain the status quo.[80] Also, there was a good deal of mistrust of the federal government's capability of maintaining safe, well-run facilities, given its past record of failures and cover-ups.[81]

The governors of the three sited states formed a coalition to block any federal effort to take over the LLRW disposal problem, recommending that authority over the problem be given to the states.[82] The unsited states agreed with this proposal, since they also feared that federal intervention could mean that they would not be given a chance to object to a poorly run disposal facility within their borders.[83] In 1980, the National Governor's Association Task Force on Low Level Waste proposed that authority should be given to the states to form regional compacts, each containing one or more facili-

78. *See id.* at 205. In 1976, the House Government Operations Committee recommended that in order to provide a comprehensive, uniform, long-term plan for the nation, the federal government should reassert federal jurisdiction over commercial sites. In 1977, the NRC recommended greater federal involvement, calling the situation a "national problem" which the states were not capable of solving. And in 1978, the DOE suggested that it should take over the siting process, combining commercial sites with defense sites. *See id.*

79. *See id.* at 207.

80. *See id.*

81. *See* Contreras, *supra* note 7, at 500; Mostaghel, *supra* note 61, at 385 (both discussing factors contributing to public's mistrust of government oversight of radioactive waste).

82. *See* BARLETT & STEELE, *supra* note 7, at 207.

83. *See* Mostaghel, *supra* note 61, at 385-86.

ties to dispose of LLRW generated within the region.[84] The proposal also suggested that the compacts be given the authority to exclude waste from other regions, recognizing the dissatisfaction of the current sited states.[85] By this time, several of the officials who had supported a federal takeover succumbed to the political pressure exerted by the states and now reconsidered their positions, advocating the state approach.[86]

In 1980, Congress took up a bill entitled the Low-Level Radioactive Waste Policy Act (LLRWPA), which echoed the proposal by the National Governor's Association Task Force.[87] At this time, Congress was also considering legislation dealing with HLRW, and thus the two bills were combined, and the House and Senate passed two very different versions in the summer of 1980.[88] Given the controversial nature of the LLRW bill, it received very little congressional scrutiny as it travelled through the legislative process.[89] This lack of scrutiny was one of several indicators that members of Congress were unsure of the issues on which they were to vote.[90] By December it was evident that the House and Senate were not going to reach a compromise on the combined bill because of differences in proposed HLRW policy.[91] In an effort to salvage the LLRW bill, legislators carved out the original LLRWPA from the combined bill,[92] and South Carolina's Governor "quietly passed the word that he would shut down Barnwell if Congress failed to address the is-

84. *See* John B. Yasinsky & Charles R. Bolmgren, *Radioactive Waste Management—A Manageable Task, in* MANAGEMENT OF RADIOACTIVE MATERIALS AND WASTES, *supra* note 37, at 73, 92.

85. *See* Mostaghel, *supra* note 61, at 386.

86. *See* BARLETT & STEELE, *supra* note 7, at 209. The DOE and the chairman of the NRC now felt that states should handle disposal of LLRW. The Carter administration, which had formerly pushed for federal jurisdiction, also recanted and decided that the states should have control. *See id.*

87. *See id.* at 207-08, 211. The bill was introduced by South Carolina Congressman Butler Derrick. *See id.*

88. *See id.* at 211, 214.

89. *See id.* at 209. The House Science and Technology Subcommittee called only one hearing in which it discussed the issue of the disposal crisis's impact on the medical community. The medical community had voiced its opinion supporting the bill and threatening that, should the crisis continue, crucial biomedical experiments would have to be curtailed, since there were no willing recipients of the LLRW they produced. *See* James W. Conrad, Jr., Note, *Glowing Their Own Way: State Embargoes and Exclusive Waste-Disposal Sites Under the Low-Level Radioactive Waste Policy Act of 1980*, 53 GEO. WASH. L. REV. 654, 655 (1985). While some critics have suggested that this threat was exaggerated, the fact remains that the medical community was a powerful lobby in favor of the LLRWPA. *See* BARLETT & STEELE, *supra* note 7, at 209-11.

90. *See* BARLETT & STEELE, *supra* note 7, at 214-15 (discussing Senators' misstatements in the debate prior to voting on the LLRWPA).

91. *See id.* at 214.

92. *See* ENGLISH, *supra* note 41, at 8.

sue. . . ."[93] Finally, on the eve of December 13, 1980, the LLRWPA was passed by the legislature, beginning the next phase of the LLRW saga.[94]

C. *The Low-Level Radioactive Waste Policy Act*

The 1980 LLRWPA was short and sweet. Its announced policy was that "each State is responsible for providing for the availability of capacity either within or outside the State for the disposal of low-level radioactive waste generated within its borders except for waste generated as a result of defense activities of the Secretary or Federal research and development activities,"[95] and that "low-level radioactive waste can be most safely and efficiently managed on a regional basis."[96] In order to carry out this policy, the LLRWPA provided that "the States may enter into such compacts as may be necessary to provide for the establishment and operation of regional disposal facilities for low-level radioactive waste."[97] The compacts were to be negotiated by the states, but would not become official until ratified by Congress.[98] The most important provision of the LLRWPA provided states with incentive to actually carry out the policy of the act by forming regional compacts; it gave approved compacts the right to *exclude* LLRW that was not generated within the region beginning January 1, 1986.[99] Therefore, if a state had not provided a disposal facility for its own LLRW by joining a compact or constructing its own site, its generators would be left without a place to dispose of their waste once the compacts' exclusionary power became effective in 1986.[100]

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93. BARLETT & STEELE, *supra* note 4, at 214. By this time, additional pressure was put on Congress because Washington had just announced its intention to close its site to out-of-state LLRW based on the results of a statewide referendum. *See infra* note 135.

94. *See* BARLETT & STEELE, *supra* note 7, at 215. The Congressman who deserved the most credit for the passage of the LLRWPA was the man who introduced the bill, South Carolina's Butler Derrick. After gaining support for the bill in the House, he took the extraordinary step of travelling over to the Senate, where he "stationed himself outside the doors to the Senate floor and lobbied members of the upper chamber as they went in to vote." *Id.* at 214.

95. Low-Level Radioactive Waste Policy Act, Pub. L. No. 96-573, § 4(a)(1)(A), 94 Stat. 3347, 3348 (1980) (amended 1985).

96. *Id.* § 4(a)(1)(B), 94 Stat. at 3348 (amended 1985).

97. *Id.* § 4(a)(2)(A), 94 Stat. at 3348 (amended 1985).

98. *See id.* § 4(a)(2)(B), 94 Stat. at 3348 (amended 1985). Congress retained power to ratify interstate compacts under the Compact Clause of the United States Constitution. U.S. CONST. art. I, § 10, cl. 3.

99. *See* Low-Level Radioactive Waste Policy Act, Pub. L. No. 96-573, § 4(a)(2)(B), 94 Stat. 3347, 3348 (1980) (amended 1985).

100. *See* Petrella, *supra* note 60, at 114.

1. *Compliance with the LLRWPA: Maine and the Northeast Compact*

Maine responded to the enactment of the LLRWPA in 1981 by passing legislation following the mandate of the federal act by accepting "responsibility for providing for the capacity for the disposal of low-level waste generated within this State."[101] The new legislation gave the Governor authority to negotiate with other states to remedy the disposal problem, and to recommend regional compacts with states that had, among other things, "identified areas within their state that meet preliminary site criteria,"[102] but it required legislative approval before the state entered into any proposed compact.[103] The Act also established the Low-Level Waste Siting Commission,[104] whose duty it was to "study several aspects of low-level waste generation, transportation, and disposal, and to assist the Governor in regional efforts to manage those wastes."[105] Soon thereafter, Maine searched for other states with which to form a compact to dispose of its LLRW, as encouraged by the LLRWPA.

Despite early indications of success, the LLRWPA would eventually fail because it lacked effective incentives to induce the states to enter into the envisioned regional compacts.[106] The three sited states, anxious to comply with the new law and to rid themselves of the burden of responsibility for the nation's waste, quickly negotiated compacts with neighboring states.[107] By mid-1982, six compact agreements had been negotiated, but only six states had gone through the legislative motions of adopting one or more of them.[108] The process of organizing compact commissions, siting facilities, arranging management for the facilities, complying with licensing requirements, and beginning operations proved to be more difficult and time-consuming than Congress imagined,[109] but there was also a significant amount of political stalling by the unsited states.[110] One

101. P.L. 1981, ch. 439, § 9.
102. *Id.*
103. *See id.*
104. *See id.*
105. L.D. 1636, Statement of Fact (110th Legis. 1981).
106. *See* Mostaghel, *supra* note 61, at 386.
107. *See* GERSHEY ET AL., *supra* note 5, at 117.
108. *See* Charles H. Montange, *Federal Nuclear Waste Disposal Policy,* 27 NAT. RESOURCES J. 309, 370 (1987).
109. *See id.*
110. *See* GERSHEY ET AL., *supra* note 5, at 117. According to the LLRWPA, the three sited states would be granted the power to exclude waste from outside their region on the first day of 1986, provided that the compacts to which they belonged were ratified by Congress. However, even if they complied, they might accept out-of-region waste and levy surcharges on the unsited states who had failed to follow the Act's mandate. Between the fear of paying surcharges on its generated LLRW some time in the future, and the fear of going through the nasty political process necessary to site a disposal facility in their own state, unsited states overwhelmingly

major problem with the process of forming compacts was the different amounts of LLRW generated by the negotiating states; large waste producers were often excluded from negotiating with smaller states because even the large waste producers objected to the siting of a facility within their borders.[111]

The disparity between small and large waste-producing states was nowhere better illustrated than in the negotiations for the proposed Northeast Compact, in which Maine was initially involved during the early eighties. Upon passage of the LLRWPA, Maine, along with New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, New York, Pennsylvania, Maryland, and Delaware, looked into the possibility of forming a compact for the disposal of LLRW generated within the Northeast region of the country.[112] During the eighteen months of negotiations which resulted in the proposed compact,[113] major problems were encountered between the small waste-producing states (the category to which Maine belonged) and the large waste-producing states.[114] The major difficulty was in choosing a host state for the region's disposal facility. One proposed solution ignored important criteria such as who was best suited to be host state by suggesting that the host state be picked randomly.[115] The small waste-producing states insisted on a proposed clause precluding a disposal facility from ever being located in a state that produced less than three percent of the region's waste.[116] When the proposed compact was finally drafted and submitted to the states' governors for approval in February of 1983, it made no mention of which state would host the future dispo-

chose to risk paying the penalty of noncompliance with the LLRWPA. *See* Mostaghel, *supra* note 61, at 386.

111. *See* BARLETT & STEELE, *supra* note 7, at 219. The states that produced the most LLRW were often unsuited for a disposal facility and usually had high populations. They argued that the disposal site should be in a state where a "safe" facility could be maintained, regardless of how much waste that state produced. The smaller waste-producing sites disagreed, arguing that the state that produced the most waste in the region should host the disposal site. "Thus, the act that Congress claimed would inaugurate an era of cooperation instead ignited political warfare, pitting state against state, region against region." *Id.*

112. *See* Anne D. Stubbs, *The Northeast Low-Level Waste Compact: Regional Cooperation in Low-Level Waste Management, in* MANAGEMENT OF RADIOACTIVE MATERIALS AND WASTES, *supra* note 37, at 42, 43.

113. *See id.*

114. *See* BARLETT & STEELE, *supra* note 7, at 231. The small waste-producing states were Maine, Vermont, New Hampshire, Rhode Island, and Delaware; these states' combined waste accounted for about five percent of the region's LLRW. The large waste-producing states, Pennsylvania, New York, Massachusetts, New Jersey, Connecticut, and Maryland, accounted for the remaining 95%. *See id.*

115. *See id.* at 231-33.

116. *See id.* at 233.

sal site and left the decision to the compact commission[117] unless a member state volunteered for the unpleasant assignment.[118]

By 1984, "the fragile unity of the Northeast states began to crumble."[119] None of the Northeast states had volunteered as hoped; New York and Pennsylvania, wary of being chosen as host state because of their large waste production, withdrew from the negotiations.[120] In early 1983, Maine was still considering entering the Northeast Compact,[121] but later that year, obviously concerned with avoiding host-state status, it passed legislation setting out a formal siting process, which required public participation and legislative approval before siting a facility within the state.[122] By this time, Maine had indicated it would not be a party to the Northeast Compact,[123] and in 1984 was considering banding together with New Hampshire and Vermont in a smaller New England Compact, making a separate agreement with a large waste-producing state, or remaining independent.[124] In the end, out of the eleven states that began negotiations, the Northeast Compact was adopted only by Connecticut, New Jersey, Delaware, and Maryland.[125]

In 1985, Maine's prospects for entering a disposal compact by the LLRWPA's 1986 deadline looked bleak, and in response to the situation Maine passed some important legislation dealing with LLRW. First, the Advisory Commission on Radioactive Waste was created to replace the Low-Level Waste Siting Commission.[126] The new commission was given "an expanded role, including [responsibility for] high-level as well as low-level waste."[127] In addition, a referen-

117. The Northeast Interstate Low-Level Radioactive Waste Commission was to be established by the compact. According to the proposed draft, the commission was to be made up of one member appointed from each state and two members from any active host state. *See* Stubbs, *supra* note 112, at 48.

118. *See id.* at 50.

119. BARLETT & STEELE, *supra* note 7, at 245.

120. *See id.* at 245-46.

121. *See* L.D. 663, Statement of Fact (111th Legis. 1983). Apparently the Maine Legislature felt sure that Maine would join the Northeast Compact within a year, only funding its siting commission until the expected adoption of the compact: "The proposed Northeast Regional Interstate Radioactive Waste Compact is expected to have a June 3, 1984, initial ratification cutoff date. It is prudent at this time to allocate funds for the [low-level waste siting] commission through fiscal year 1984." *Id.*

122. *See* P.L. 1983, ch. 500, § 5.

123. *See* BARLETT & STEELE, *supra* note 7, at 233-34.

124. *See id.* at 234, 246-47.

125. *See id.* at 247. Maryland and Delaware soon dropped out of the Northeast Compact to join the Appalachian Compact. *See infra* note 169 and accompanying text. Thus, the Northeast Compact is presently made up of only two states, Connecticut and New Jersey; in addition, these two states solved the dispute over who was to be host state by agreeing that *each* would build its own disposal facility and be responsible for its own waste. *See id.*

126. *See* P.L. 1985, ch. 309, § 6.

127. L.D. 642, Statement of Fact (112th Legis. 1985).

dum held that November resulted in the enactment of legislation requiring voter approval for either operation of a disposal facility in Maine or Maine's participation in an interstate compact agreement that would export Maine LLRW to another state.[128] The same legislation remains in effect today, and played an important role in the debates over the Texas Compact.

By 1985, it became obvious that no state would meet the 1986 deadline by assuming responsibility for the low-level waste generated within its borders. Thirty-seven states had, by that time, tentatively entered into compacts, but none of the compacts had been ratified,[129] only three compacts had designated host states for the disposal site,[130] and no new disposal facilities had been constructed or even sited.[131] Congress moved especially slowly in ratifying proposed compacts, giving the impression that it was waiting for *all* the compacts to be negotiated before it approved the *first*.[132] If a state had not yet assumed responsibility for *its* waste, its members of Congress were reluctant to ratify another region's compact.[133] David Stevens, an aide to the Governor of Washington, stated the problem precisely: "'I just don't see any Congressman voting for a compact that would shut off a burial site for his state .... I just don't see him voluntarily voting on such a measure. Then he's really created a political problem for himself.'"[134]

Finally, Congress again realized that something would have to be done to remedy the situation. Nevada, South Carolina, and Washington, each of whom had continued to accept the nation's waste since enactment of the LLRWPA,[135] found themselves in the same

128. *See* ME. REV. STAT. ANN. tit. 38, § 1492 (West 1989).

129. *See* Petrella, *supra* note 60, at 114.

130. *See* ENGLISH, *supra* note 41, at 8. The Northwest Compact had designated Washington as its host state; Washington planned to allow the region to use the Richland site for disposal of its LLRW. The Rocky Mountain Compact had chosen Colorado as its host state, and the Central Midwest Compact had chosen Illinois as its host state. *See id.*

131. *See* Petrella, *supra* note 60, at 114.

132. *See* BARLETT & STEELE, supra note 7, at 238.

133. *See id.*

134. *Id.*

135. That is not to say that in each case the sited states *voluntarily* accepted the nation's waste since the LLRWPA. For example, in 1980, the voters of the state of Washington enacted an initiative which prohibited "the transportation and storage within Washington of radioactive waste produced outside the state." Washington State Bldg. & Constr. Trades Council v. Spellman, 684 F.2d 627, 629 (1982). In response, the operator of the Richland site along with seven other plaintiffs brought an action for injunctive relief and for a declaration that the Washington initiative was unconstitutional. *See id.* The state creatively argued that by enacting the LLRWPA, Congress had passed authority to regulate LLRW disposal to the states, and therefore, that Washington could exclude out-of-state waste without violating the Supremacy or Commerce Clauses. *See id.* The court stated, however, that "[u]ntil the state participates in a compact which has become law, the Low-Level Waste Act

position in 1985 that they were in in 1979, and again threatened to shut down or exclude out-of-state waste as of January 1, 1986.[136] The remaining states, however, were relying on the sited states to continue to accept waste, and if the three states made good on their threats, the nation would have been faced with a major disposal crisis. Congress responded to this situation by passing compromise legislation in a haphazard rush to beat both the LLRWPA's 1986 deadline and the date of adjournment for the Ninety-ninth Congress.[137] The sited states agreed to accept a limited amount of LLRW over the next seven years in exchange for a series of greater incentives for the unsited states to make progress towards assuming responsibility for the waste they produced.[138]

D. The Low-Level Radioactive Waste Policy Amendments Act

The statute that resulted from Congress's rushed efforts to beat the January 1, 1986 deadline was much more complex than the original LLRWPA. The policies announced by the new Low-Level Waste Policy Amendments Act (LLRWPAA) were substantially the same,[139] and, as before, states were allowed to "enter into such compacts as may be necessary to provide for the establishment and operation of regional disposal facilities for low-level radioactive

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does not grant power to any state to close its borders to interstate traffic in low-level waste." *Id.* at 630. Therefore, "[t]he initiative violates the Supremacy Clause because it seeks to regulate legitimate federal activity and to avoid the preemption of the Atomic Energy Act." *Id.* In addition, the statute was found to violate the Commerce Clause for the same reasons the New Jersey statute was struck down in *Philadelphia v. New Jersey*, 437 U.S. 617 (1978). *See id.* at 631-32; *see also supra* text accompanying notes 64-71. The statute used illegitimate means to serve its purpose because it discriminated against out-of-state LLRW without a showing that out-of-state waste posed any different safety or environmental hazards than waste generated within the state; thus, it acted to isolate Washington from the nation's problem. *See* Washington State Bldg. & Constr. Trades Council v. Spellman, 684 F.2d at 631.

136. *See* ENGLISH, *supra* note 41, at 8-9. Although Congress had not granted approval to the compacts to which Washington, Nevada, and South Carolina belonged, and thus, arguably, they did not have the authority to exclude out-of-state waste, their threats were taken seriously by Congress. *See id.*

137. *See* Peckinpaugh, *supra* note 7, at 56. The compromise bill was finally passed on December 19, 1985, just hours before Congress adjourned for the holiday season. *See id.* Like the LLRWPA, the 1985 legislation was passed by a Senate and House that had little understanding of the issues the law dealt with or how the law would operate. *See id.* at 55-56. The Act was enacted into law by President Reagan on January 15, 1986. *See id.* at 49-50.

138. *See id.* at 54-55.

139. *Compare* 42 U.S.C. § 2021c(a)(1)(A) (1994) ("Each State shall be responsible for providing, either by itself or in cooperation with other States, for the disposal of . . . low-level radioactive waste generated within the State (other than by the Federal Government) . . . ."), *and* 42 U.S.C. § 2021d(a)(1) (1994) ("It is the policy of the Federal Government that the responsibilities of the States . . . for the disposal of low-level radioactive waste can be most safely and effectively managed on a regional basis.") *with supra* text accompanying notes 95-97.

waste."[140] Most important, the new statute extended the period in which the disposal facilities at Beatty, Nevada, Richland, Washington, and Barnwell, South Carolina were required to accept LLRW from the remaining unsited states, allowing access to continue until December 31, 1992.[141] But unlike the 1980 Act, the LLRWPAA imposed upon the unsited states a series of milestones designed to insure that those states at that time unable to take responsibility for their wastes would be able to assume responsibility by January 1, 1993.[142] It also imposed a series of increasingly severe penalties for those states in noncompliance.[143] The most severe penalty for a state that failed to take responsibility would have allowed some in-state LLRW generators to require that state to take possession and responsibility for the waste the generator produced.[144]

The Act permitted the three sited states to cap the levels of LLRW they were required to accept for disposal.[145] They were also allowed to impose a surcharge in addition to the normal cost of disposal on out-of-state waste.[146] The maximum surcharge allowed to be imposed on LLRW generators by the LLRWPAA doubled every two years, authorizing the sited states to charge an amount not to exceed $10 per cubic foot of LLRW in 1986 and 1987, $20 per cubic foot in 1988 and 1989, and $40 per cubic foot in 1990, 1991, and 1992.[147] Twenty-five percent of the surcharges paid to the sited states were to be deposited in an escrow account[148] to be subsequently paid back to states that fulfilled the statute's milestone requirements,[149] providing the first of the statute's incentives to the unsited states to comply. The remaining incentives were in the form of penalties for noncompliance.[150]

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140. 42 U.S.C. § 2021d(a)(2) (1994).

141. *See id.* § 2021e(a)-(c).

142. *See id.* § 2021e(e)(1).

143. *See id.* § 2021e(e)(2).

144. *See id.* § 2021e(e)(2)(C).

145. *See id.* § 2021e(b). For example, the facility at Barnwell could limit the amount of waste accepted for disposal to 8,400,000 cubic feet of LLRW over the seven-year period. *See id.* § 2021e(b)(1). The formula used to determine the amounts each facility had to accept was based on the amounts of waste they each accepted in 1983, *see* ENGLISH, *supra* note 41, at 10, in order to guarantee that the sited states would not be forced to accept more LLRW during the seven-year interim period than they did prior to 1986. *See* Petrella, *supra* note 60, at 115.

146. *See* 42 U.S.C. § 2021e(d)(1) (1994).

147. *See id.* § 2021e(d)(1)(A)-(C).

148. *See id.* § 2021e(d)(2)(A).

149. *See id.* § 2021e(d)(2)(B). The funds received by the state for complying with the milestones were to be used to "establish low-level radioactive waste disposal facilities; . . . mitigate the impact of low-level radioactive waste disposal facilities on the host State; . . . regulate low-level radioactive waste disposal facilities; or . . . ensure the decommissioning, closure, and care during the period of institutional control of low-level radioactive waste disposal facilities." *Id.* § 2021e(d)(2)(E)(i).

150. *See id.* § 2021e(e)(2).

The milestones set forth by the LLRWPAA were to be achieved by each non-sited compact region and each unsited state that was not a member of a compact region.[151] By July 1, 1986, each state that was not a member of a compact was to either ratify compact legislation or indicate its intent to develop its own site for the disposal of its LLRW.[152] Failure to achieve this requirement would result in a doubling of the surcharge imposed on LLRW generators from the non-complying state by the accepting disposal facility until December 31, 1986, after which the non-complying state could be denied access to the disposal facility.[153] By January 1, 1988, each non-sited compact region was to identify the compact's host state and to have taken preliminary steps toward establishing a disposal facility, such as developing a siting plan.[154] Each independent state was, by January 1, 1988, to develop a siting plan for its proposed disposal facility.[155] Failure to comply with this milestone would result in a doubling of the surcharge imposed by the accepting disposal facility until June 30, 1988, at which time the surcharge would be quadrupled.[156] If the non-complying state did not achieve the milestone requirements by January 1, 1989, that state could be denied access to the disposal facilities by the sited states.[157] By January 1, 1990, a complete application for the operation of a LLRW disposal facility was to have been filed with the NRC or with the agreement state, or, in the case of an independent state, the Governor must have declared that the state will be capable of assuming responsibility for its LLRW on January 1, 1993.[158] Failure to meet this milestone could result in immediate denial of the non-complying state's access to the disposal facilities.[159] Finally, by January 1, 1992, a completed

151. *See id.* § 2021e(e)(1). Obviously the three sited states were not required to comply with the milestones of the LLRWPAA. Also, at the same time Congress enacted the LLRWPAA it ratified seven interstate compacts. *See infra* note 166 and accompanying text. Therefore, those states that had compacted with South Carolina, Washington, and Nevada were exempt from the milestone scheme. Additionally, states that entered a contract with the compact commission of a region with an operating disposal facility for the disposal of that state's LLRW, while still required to pay the applicable surcharges on that LLRW, were not required to meet the milestone requirements. *See id.* § 2021e(e)(1)(F). *See also* ENGLISH, *supra* note 41, at 9-11 (summarizing milestone requirements of the LLRWPAA).

152. *See* 42 U.S.C. § 2021e(e)(1)(A) (1994). The declaration of intent could have been by enactment of legislation or by the Governor's certification. *See id.*

153. *See id.* § 2021e(e)(2)(A).

154. *See id.* § 2021e(e)(1)(B)(i).

155. *See id.* § 2021e(e)(1)(B)(ii).

156. *See id.* § 2021e(e)(2)(B)(i).

157. *See id.* § 2021e(e)(2)(B)(ii).

158. *See id.* § 2021e(e)(1)(C). If the independent state fulfills this milestone by a declaration that it will be capable of disposing of its LLRW by 1993, the Governor must also include a description of "the actions that will be taken to ensure that such capacity exists." *Id.* § 2021e(e)(1)(C)(ii).

159. *See id.* § 2021e(e)(2)(C).

application for the operation of a disposal facility in each independent state must have been filed with the NRC or with the agreement state.[160] Failure to meet this deadline would result in triple the surcharges being imposed on the generators for their LLRW from the non-complying state.[161] If a penalty was imposed on any state that failed to comply with one of the above milestones, that penalty would be lifted once the state fulfilled the applicable milestone requirement.[162]

The most severe penalty imposed on a non-complying state by the LLRWPAA was the "take title" provision. If a state was unable to provide for the disposal of the LLRW generated within its borders by January 1, 1993, the generators of that LLRW could request the state to take possession of the waste, which would make the state liable for all damages incurred by the generator after this threshold date.[163] The state could refuse this request, but would then be required to pay to the generator twenty-five percent of the amount recovered from the surcharges imposed on that generator from January 1, 1990 through December 31, 1992, for disposal of the generator's LLRW.[164] If, by January 1, 1996, the state was still unable to provide for the disposal of the LLRW generated within its borders, the state was then prohibited from refusing the generators' requests, and would be required to "take title" to the LLRW produced by these generators.[165]

1. General Compliance With the LLRWPAA

When it enacted the LLRWPAA, Congress also ratified the seven interstate compacts that had been proposed under the LLRWPA.[166]

160. *See id.* § 2021e(e)(1)(D).
161. *See id.* § 2021e(e)(2)(D).
162. *See id.* § 2021e(e)(4).
163. *See id.* § 2021e(d)(2)(C)(i).
164. *See id.* § 2021e(d)(2)(C)(ii).
165. *See id.* § 2021e(d)(2)(C). Along with being the most severe penalty imposed by the LLRWPAA, the "take title" provision was also the Act's most controversial provision. It was viewed as a necessary addition by the senators sponsoring the Act, for without it, they feared that the states would not have sufficient incentive to provide for the disposal of their LLRW. Some, however, doubted whether the provision would pass constitutional muster. *See* Petrella, *supra* note 60, at 118. The skeptics' prediction proved to be true, for the "take title" provision was ultimately struck down by the Supreme Court in *New York v. United States*, 505 U.S. 144, 177 (1992). *See infra* notes 217-23 and accompanying text.
166. The compacts that were ratified were: the Northwest Interstate Compact on Low-Level Radioactive Waste Management, made up of member states Alaska, Hawaii, Idaho, Montana, Oregon, Utah, Washington, and Wyoming; the Central Interstate Low-Level Radioactive Waste Compact, made up of member states Arkansas, Iowa, Kansas, Louisiana, Minnesota, Missouri, Nebraska, North Dakota, and Oklahoma; the Southeast Interstate Low-Level Radioactive Waste Management Compact, made up of member states Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia; the Central Midwest Interstate

Maine was not a member of any of the compacts that were ratified, having backed out of negotiations for the Northeast Compact, and having been unsuccessful in finding another compact to join.[167] Within three years, Congress approved two more interstate compacts,[168] bringing the total amount of ratified compacts to nine. Although there have been no new compacts ratified since 1988, it should be noted that compact membership is by no means static; in fact, several states have dropped out of one compact to join another. For example, Delaware and Maryland, originally members of the Northeast Compact discussed above, dropped out to join the Appalachian Compact soon after it was ratified.[169] It should also be noted that, as of this writing, none of the nine compacts have established an operating disposal facility.[170]

2. *Maine's Compliance With the LLRWPAA*

Maine responded to the enactment of the LLRWPAA by quickly passing legislation to meet the fast-approaching July 1, 1986 deadline. In April, 1985, the Maine Legislature passed "An Act to Provide for Development of a State Low-Level Radioactive Waste Facility if Necessary."[171] The statute allowed the Governor to negotiate with other states to form an interstate compact for the disposal of LLRW,[172] and, since Maine had not yet ratified compact legislation, it satisfied the federal milestone by declaring Maine's intent

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Low-Level Radioactive Waste Compact, made up of member states Illinois and Kentucky; the Midwest Interstate Low-Level Radioactive Waste Management Compact, made up of member states Iowa, Indiana, Michigan, Minnesota, Missouri, Ohio, and Wisconsin; the Rocky Mountain Low-Level Radioactive Waste Compact, made up of member states Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming; and the Northeast Interstate Low-Level Radioactive Waste Management Compact, made up of member states Connecticut, New Jersey, Maryland, and Delaware. *See* Omnibus Low-Level Radioactive Waste Interstate Compact Consent Act, Pub. L. No. 99-240, §§ 221-27, 99 Stat. 1859, 1860, 1863, 1871, 1880, 1892, 1902, 1909 (1985).

167. *See* ENGLISH, *supra* note 41, at 8.

168. In May, 1988, Congress approved the Appalachian States Low-Level Radioactive Waste Compact, made up of member states Pennsylvania and West Virginia. *See* Appalachian States Low-Level Radioactive Waste Compact Consent Act, Pub. L. No. 100-319, § 5, 102 Stat. 471 (1988). In November, 1988, Congress approved the Southwestern Low-Level Radioactive Waste Disposal Compact, made up of member states Arizona and California. *See* Southwestern Low-Level Radioactive Waste Disposal Compact Consent Act, Pub. L. No. 100-712, § 5, 102 Stat. 4773 (1988).

169. *See* GERSHEY ET AL., *supra* note 5, at 126-27. Thus, the Northeast Compact, which was originally conceived of as encompassing eleven states, including Maine, is presently made up of only two states that do not share a common border.

170. *See* Suzanne Gamboa, *Plans for Radiation Dump Met with Worry, Assurances; Controversy Heats Up as Hearing Approaches on Proposed West Texas Facility*, AUSTIN AMERICAN-STATESMAN, Aug. 4, 1996, at A1.

171. *See* P.L. 1985, ch. 705.

172. *See id.* § 3 (codified as amended at ME. REV. STAT. ANN. tit. 38, § 1474 (West 1989 & Supp. 1996-1997)).

"to develop a site for the location of a low-level radioactive waste disposal facility within the State."[173] The title of the bill, however, made it obvious that Maine would only develop such a site as a last resort in the event that it was unable to find a suitable arrangement to ship its LLRW to another state. The three unsuccessful disposal facilities in New York, Kentucky, and Illinois had experienced problems with SLB; thus the Maine legislation also outlawed SLB as a method of disposing of LLRW in the state.[174]

To meet the January 1, 1988 milestone, a LLRW disposal facility siting plan for the state of Maine was completed, reviewed by the concerned state agencies and the public, and sent to the DOE and the three sited states in time to meet the deadline.[175] The siting plan consisted of a proposed schedule of the tasks necessary to "screen, characterize, select, license, design, and construct a LLRW facility,"[176] as well as a discussion of those tasks and the "various external forces . . . which could adversely affect the schedule."[177] The proposed schedule suggested that the disposal facility would be operational by "the last quarter of 1995."[178] While the DOE found that the Maine plan satisfied its requirement under the federal milestone,[179] clarifications to the plan were necessary to convince the sited states that Maine had indeed complied with the LLRWPAA.[180]

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173. *Id.* § 5 (codified as amended at ME. REV. STAT. ANN. tit. 38, §§ 1481, 1482 (West 1989 & Supp. 1996-1997)). The DOE and the three sited states agreed that this statute satisfied the federal milestone requirement and Maine was reimbursed $6,312.49 for 25% of the surcharges it had paid to the sited states for disposal of its LLRW. *See* MAINE ADVISORY COMM'N ON RADIOACTIVE WASTE, LOW-LEVEL RADIOACTIVE WASTE BACKGROUNDER 29 (2d ed. 1990) [hereinafter BACKGROUNDER].

174. *See* P.L. 1985, ch. 705, § 5 (codified as amended at ME. REV. STAT. ANN. tit. 38, §§ 1481, 1482 (West 1989 & Supp. 1996-1997)).

> Any . . . facility developed in the State shall employ the safest available technology. In order to cope with the humid climate, high water table, cold winters and other geological characteristics of the State, improved engineered disposal methods in addition to geological barriers shall be used rather than conventional shallow land burial.

Id.

175. *See* BACKGROUNDER, *supra* note 173, at 30.

176. Maine Low-Level Radioactive Waste Authority Draft Siting Plan, Jan. 1, 1988, 2-1 (on file with Maine Law and Legislative Reference Library) [hereinafter Siting Plan].

177. *Id.* at 1-2.

178. *Id.* at 2-10. Of course, the objective stated in the LLRWPAA is that each state should be able to "provide for the disposal of all [LLRW] generated within such state" by January 1, 1993. 42 U.S.C. § 2021e(d)(2)(C) (1994). Maine admitted that its siting plan would not meet the deadline, but emphasized "the Governor's commitment to manage the State's LLRW after January 1, 1993." Siting Plan, *supra* note 176, at 4-1.

179. *See* BACKGROUNDER, *supra* note 173 at 30. The DOE therefore reimbursed Maine for 25% of the surcharges it had paid to the sited states, an amount totaling $25,842.78. *See id.*

180. *See id. See also* GERSHEY ET AL., *supra* note 5, at 129.

During this period, of course, Maine was still searching for another state that would be willing to make a deal to accept Maine's LLRW and thereby relieve Maine of the duty to construct its own disposal facility. In 1989, for example, Maine entered a contract with the Rocky Mountain Compact that allowed Maine generators to continue to ship LLRW to the Beatty, Nevada disposal facility[181] from January 1, 1990 to December 31, 1992.[182] The significance of this arrangement was that Maine's contractual right to ship its LLRW to Nevada would continue even if Maine was found out of compliance with a milestone of the LLRWPAA.[183] Thus, even if Maine was cut off under federal law from the Washington and South Carolina sites, Nevada would still be bound under this contract to accept Maine's LLRW for disposal. This contract was approved by Maine's voters in the statutorily mandated referendum on November 7, 1989.[184] In addition, earlier in 1989, Maine had for the first time approached the state of Texas with a draft of a proposed waste disposal compact between the two states.[185] Texas, one of the few remaining independent states, had recently settled on a location for its LLRW disposal facility,[186] and was an attractive potential partner for other independent states that were, like Maine, still aiming to join a compact.

To meet the January 1, 1990 milestone under the LLRWPAA, Maine Governor John McKernan, Jr. declared that Maine would be capable of assuming responsibility for its LLRW on January 1, 1993, despite the fact that the 1988 Siting Plan called for the state's disposal facility to be operational no sooner than the end of 1995.[187] His management plan called for Maine's LLRW generators to store waste on-site from 1993 (when the three sited states would be allowed to cut off Maine's access under the LLRWPAA) until a disposal facility became available, either within the state or outside of the

181. The disposal facility in Beatty, Nevada, served as the host facility for the Rocky Mountain Compact. *See* Omnibus Low-Level Radioactive Waste Interstate Compact Consent Act, Pub. L. No. 99-240, § 201, 99 Stat. 1859, 1903 (1986) (codified as amended at 42 U.S.C. § 2021 (1994)).

182. *See* BACKGROUNDER, *supra* note 173, at 33. In return, Maine promised to pay $168,750 to the Rocky Mountain Compact Commission for each year that it would have access to the disposal facility. This charge was required to be paid regardless of whether any LLRW was actually shipped to the Beatty site. In addition, Maine generators would be charged $45 per cubic foot of LLRW for the first 3,750 cubic feet disposed, and $55 per cubic foot for additional waste. *See id.* at 34.

183. *See id.* at 33. *See also* 42 U.S.C. § 2021e(e)(1)(F); ENGLISH, *supra* note 41, at 10.

184. *See* BACKGROUNDER, *supra* note 173, at 34.

185. *See id.* at 32.

186. *See* ENGLISH, *supra* note 41, at 15. The site that had been chosen at this point by the state of Texas for its LLRW disposal facility would later be rejected. *See infra* notes 243-48 and accompanying text.

187. *See* BACKGROUNDER, *supra* note 173, at 31.

state.[188] Furthermore, the plan noted that the contract between Maine and the Rocky Mountain Compact guaranteed Maine generators a disposal site until December 31, 1992, and therefore guaranteed that Maine generators would begin 1993 with empty storage facilities.[189] In addition, the plan stressed that Maine was continuing its efforts to arrange for out-of-state disposal of its LLRW.[190] Finally, if the construction of a disposal facility was not complete by 1996, Governor McKernan promised that a centralized storage facility would be made available to Maine generators who had by that time exhausted their storage space.[191] Based on the Governor's certification, the DOE found Maine in compliance with the January 1, 1990 LLRWPAA deadline.[192]

3. New York v. United States

In June of 1992, the Supreme Court handed down its decision in *New York v. United States*,[193] a case in which the state of New York had challenged the constitutionality of the LLRWPAA. Like Maine, New York was unaligned with a regional compact, and therefore the outcome of its challenge to the LLRWPAA was very important to Maine. New York had thus far complied with the federal milestones, but was encountering difficulty in finding a location for its state disposal facility because of the NIMBY syndrome.[194] The state brought its action against the United States in 1990, seeking a declaratory judgement that the LLRWPAA violated the Fifth Amendment's Due Process Clause, the Tenth Amendment, the Eleventh Amendment, and the Guarantee Clause of Article IV of the U.S. Constitution.[195] The District Court dismissed the complaint,[196] and this decision was affirmed by the Court of Appeals.[197] The Supreme Court granted certiorari specifically to consider New York's argument that the LLRWPAA violates the Tenth Amendment and the Guarantee Clause.[198]

New York's argument first conceded that Congress had the power under the Commerce Clause to regulate the disposal of LLRW,[199]

188. *See id.*
189. *See id.*
190. *See id.*
191. *See id.*
192. *See id.* Therefore, Maine was refunded 25% of the surcharges it paid on its LLRW, an amount totalling $109,479. *See id.*
193. 505 U.S. 144 (1992).
194. *See id.* at 154. For a discussion of NIMBY, see authorities cited *supra* note 28.
195. *See* New York v. United States, 505 U.S. at 154.
196. *See* New York v. United States, 757 F. Supp. 10 (N.D.N.Y. 1990).
197. *See* New York v. United States, 942 F.2d 114 (2d Cir. 1991).
198. *See* New York v. United States, 505 U.S. at 154.
199. *See id.* at 159-60. *See generally,* Robert L. Glicksman, *Interstate Compacts for Low-Level Radioactive Waste Disposal: A Mechanism for Excluding Out-of-State*

and also that Congress had the power under the Supremacy Clause to pass legislation that would preempt conflicting state legislation.[200] The Court agreed with these concessions,[201] and also with the basic premise of New York's argument, which was that "[w]hile Congress has substantial powers to govern the Nation directly, including in areas of intimate concern to the States, the Constitution has never been understood to confer upon Congress the ability to require the States to govern according to Congress's instructions."[202] The Court noted, however, that while the federal government could not *require* the states to legislate in a certain way, it could *encourage* the states to legislate in a certain way by providing the states with incentives.[203] For example, Congress would be free to condition the payment of federal funds on the state making certain legislative choices.[204] Similarly, where Congress had the authority to regulate private activity in a certain sphere, it would be free to "offer States the choice of regulating that activity according to federal standards or having state law preempted by federal regulation."[205]

Based on the above premise, New York pointed to Congress's mandate that "[e]ach State shall be responsible for providing, either by itself or in cooperation with other States, for the disposal of . . . low-level radioactive waste generated within the State,"[206] arguing that this constituted a "direct command from Congress, enforceable independent of the . . . incentives provided by the Act."[207] Because "Congress may not simply 'commandee[r] the legislative processes of the States by directly compelling them to enact and enforce a federal regulatory program,'"[208] New York argued, the LLRWPAA was inconsistent with the Tenth Amendment to the Constitution.[209]

Waste, in LOW-LEVEL RADIOACTIVE WASTE REGULATION, *supra* note 2, at 63, 66-67.

200. *See* New York v. United States, 505 U.S. at 160. *See generally,* Glicksman, *supra* note 200, at 65-66.

201. *See* New York v. United States, 505 U.S. at 159-60.

202. *Id.* at 162.

203. *See id.* at 161-66.

204. *See id.* "Such federal 'suggestion' had been approved relatively recently in a case in which the federal government sought to induce state adoption of a federally-determined drinking age by withholding a portion of federal highway funds from those states which failed to accept the congressionally-selected minimum age." Petrella, *supra* note 60, at 120. This case, *South Dakota v. Dole,* 483 U.S. 203, 206 (1987), was quoted by Justice O'Connor in the *New York v. United States* majority opinion: "Congress may attach conditions on the receipt of federal funds," New York v. United States, 505 U.S. at 167 (quoting South Dakota v. Dole, 483 U.S. 203, 206 (1987)).

205. New York v. United States, 505 U.S. at 167.

206. 42 U.S.C. § 2021c(a)(1)(A) (1994).

207. New York v. United States, 505 U.S. at 169.

208. *Id.* at 161 (alteration in original) (quoting Hodel v. Virginia Surface Mining & Reclamation Ass'n, 452 U.S. 264, 288 (1981)).

209. *See id.* at 169.

The Court, however, declined to construe the LLRWPAA's policy statement "as a command to the States independent of the remainder of the Act."[210] Instead, the Court adopted the United States' construction, that the policy statement, when read together with the remainder of the Act, affords the States three sets of choices.[211] The Court then went on to subject each of these three "choices" to a constitutional test.

The Court divided the incentives by which the LLRWPAA encouraged the states to comply with its schedule of milestones into three categories. It described as "monetary incentives" the Act's promised rebate of twenty-five percent of any state's surcharge payments if that state was in compliance with the federal milestones.[212] The Court held that the monetary incentives operated as permissible exercises of Congress's Commerce Clause and Spending Clause powers, and therefore did not violate the Tenth Amendment.[213] Nor were the "access incentives," the potential penalties of double, triple, or quadruple surcharges or denial of access to a disposal facility by a non-complying state, in violation of the Constitution.[214] The access incentives were permissible because the states were given a choice between regulating LLRW disposal themselves according to federal standards[215] or being subject to federal regulations that fall well within Congress's power to authorize states to discriminate against interstate commerce.[216]

The last incentive under the LLRWPAA reviewed by the Supreme Court was the "take title provision," under which any state unable to provide for the disposal of its generators' LLRW by January 1, 1996 could be compelled to take possession of that waste, and assume liability for any damages caused by its failure to do so.[217] "In this provision," the Court said, "Congress has crossed the line distinguishing encouragement from coercion."[218] The Court first pointed out that the effect of the provision was to offer the states a "choice" between regulating according to federal standards or taking title to its generators' LLRW.[219] Of course, the Court had already noted that Congress lacked the power simply to compel a state to legislate according to federal standards. Neither did it have

210. *Id.* at 170.

211. *See id.*

212. *Id.* at 152-53. *See generally,* 42 U.S.C. §§ 2021e(d)(2), (e)(1) (1994).

213. *See* New York v. United States, 505 U.S. at 171-73.

214. *See id.* at 173-74.

215. *Id.* at 174 ("by attaining local or regional self-sufficiency").

216. *Id.* ("authorizing sited States and regions to deny access to their disposal sites").

217. *See id.* at 174-75.

218. *Id.* at 175.

219. *Id.*

the power, the Court said, to transfer the ownership of LLRW from its generator to a state.[220] The Court therefore stated:

> Because an instruction to state governments to take title to waste, standing alone, would be beyond the authority of Congress, and because a direct order to regulate, standing alone, would also be beyond the authority of Congress, it follows that Congress lacks the power to offer the States a choice between the two. . . . A choice between two unconstitutionally coercive regulatory techniques is no choice at all.[221]

Having found the take title provision to be inconsistent with the United States Constitution, the court determined that it was severable from the rest of the Act,[222] and thus removed "the bite behind the LLRWPAA's bark."[223]

III. THE TEXAS COMPACT

A. *Negotiations and Siting of Facility*

As of the January 1, 1988 LLRWPAA deadline, there were seven states that had not entered into a regional compact for the disposal of LLRW: Maine, Massachusetts, New Hampshire, New York, Rhode Island, Texas, and Vermont.[224] Many of these states were still interested in joining a compact, however, because it was feared that an independent state would not have the power under the LLRWPAA to exclude out-of-state waste.[225] Of these seven remaining independent states, Texas was the most attractive potential partner for a regional compact. Texas had an early start in the siting process,[226] and as noted above, Texas had by this time chosen a prospective site for its disposal facility. Although experiencing problems with the NIMBY syndrome,[227] states probably discounted

220. *See id.*

221. *Id.* at 176.

222. *See id.* at 187.

223. Mostaghel, *supra* note 61, at 422. It should be noted that the Court, almost in passing, stated that there was some question as to whether any claim under the Article IV Guarantee Clause would be justiciable. But it quickly concluded that the monetary and access incentives which had passed constitutional scrutiny under the Tenth Amendment also did not violate the Guarantee Clause (assuming that the question was justiciable) because "neither . . . can reasonably be said to deny any State a republican form of government." New York v. United States, 505 U.S. at 185.

224. *See* GERSHEY ET AL., *supra* note 5, at 128-29. Washington D.C. had also not entered a compact; nor had any of the U.S. Territories, which, for purposes of the LLRWPAA were considered to have the same status as states. *See id.*

225. *See generally*, Glicksman, *supra* note 199, at 67-68. *Cf.* Conrad, *supra* note 89 (discussing whether a single state would have the power to exclude out-of-state waste under the LLRWPAA).

226. *See* ENGLISH, *supra* note 41, at 8.

227. *See* Rick Zuercher, *Maine, Vermont Encourage Texas to Form Low Level Waste Compact,* NUCLEONICS WEEK, May 2, 1991, *available in* 1991 WL 2443497. A

the importance of these problems because NIMBY was to be expected everywhere.[228] As previously noted, Maine approached Texas in 1989 with a draft of a proposed waste disposal compact between the two states. Around this time Texas was also being wooed by Vermont, Rhode Island and Puerto Rico.[229] By the early nineties, Maine, Vermont, and Texas had discussed the possibilities of entering into a regional compact agreement in which Texas would accept Maine and Vermont's LLRW in return for twenty million dollars from each state.[230] Texas was certainly considering this offer,[231] but since it had "repeatedly insisted it would provide long-term [disposal] only for LLW generated within its own borders,"[232] it was hesitant to accept.[233]

The history of Texas's policy with respect to LLRW disposal is relatively unique. Soon after the passage of the LLRWPA in 1980, Texas officials took the responsible position that "their state, the nation's fifteenth-largest waste producer, had a sufficient volume of it to justify its own burial ground."[234] Therefore, "[a]s other states began negotiations [in the hopes of forming regional compacts], the [Texas] legislature created the Texas Low-Level Radioactive Waste Disposal Authority to build and operate a dump for Texas waste."[235] In early 1983, the Authority undertook a siting study that used hydrological, geological, meteorological and other environmental-im-

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representative of the Texas Low-Level Radioactive Waste Disposal Authority (the agency charged with finding a suitable site for a disposal facility in Texas) remarked in 1985, "'[t]he overriding statement of the people is clear: "We need a site, but not here." NIMBY ("not in my backyard") has followed us wherever we have gone.'" E. William Colglazier & Mary R. English, *Low-Level Radioactive Waste: Can New Disposal Sites Be Found? in* LOW-LEVEL RADIOACTIVE WASTE REGULATION, *supra* note 2, at 215, 222 (quoting T.W. Blackburn III, *Low-Level Radioactive Waste Activities in Texas,* paper presented at the Radioactive Exchange Decisionmaker's Forum, Charleston, S.C., June, 1985).

228. *See* Contreras, *supra* note 7, at 535-36 (describing NIMBY syndrome generally); Michael E. Burns, *Living the Past, Facing the Future, in* LOW-LEVEL RADIOACTIVE WASTE REGULATION, *supra* note 2, at 279, 293-94 (discussing NIMBY generally). The NIMBY protests ultimately caused Texas to reject the site it was considering for its disposal. *See* discussion *infra* notes 242-47 and accompanying text.

229. *See* GERSHEY ET AL., *supra* note 5, at 128.

230. *See* ENGLISH, *supra* note 41, at 15.

231. Texas Governor Ann Richards was approached by Maine Governor John McKernan, Jr. at a 1991 National Governors' Association conference, sparking Richards's interest in an agreement between Maine and Texas. From Texas's perspective, Maine was an ideal state to compact with because it was a small waste-producing state (at that time generating about 7,000 cubic feet annually compared with Texas's 30,000-35,000 cubic feet annually) with only one nuclear power plant, scheduled to be decommissioned in 2008. *See* Zuercher, *supra* note 227.

232. *Id.*

233. *See id.*

234. BARLETT & STEELE, *supra* note 7, at 228.

235. *Id. See* TEX. HEALTH & SAFETY CODE ANN. § 402.002 (West 1992).

pact criteria to decrease the number of potential sites for a disposal facility.[236] By the end of 1984, the Authority had narrowed its search for site locations to three counties, but citizen opposition to an in-state disposal facility was already growing.[237] In January of 1985, the Texas Authority was prepared to name McMullen County as the ideal location for a disposal facility; the Authority's projections indicated that a dump could be operational by the middle of 1988.[238] By February, however, public opposition to the McMullen County site had become so great that the Texas Legislature, against the recommendation of the Authority, ordered that the search for a suitable site begin anew, this time restricting potential locations to state-owned land.[239]

So the Authority started again from scratch, and this time it settled on Hudspeth County, an arid and sparsely populated region, as the site for the Texas disposal facility.[240] Hudspeth County is the third largest county in Texas, with a population of fewer than 2,000 people.[241] By the end of the eighties, the Authority planned to construct the facility near Fort Hancock in Hudspeth County,[242] about thirty miles from El Paso.[243] By early 1991, Maine and Vermont, anxious to form an interstate compact with Texas, were offering to help finance the construction of a Fort Hancock disposal facility,[244] but again, citizen opposition to the proposed waste dump was growing in nearby El Paso County.[245] Adding to the Authority's problems, Texas Governor Ann Richards, who favored the formation of a compact between Texas, Maine and Vermont, opposed the Fort Hancock location for a future disposal facility.[246] Finally, after spending approximately three million dollars in legal fees, in 1991 the county of El Paso was successful in convincing the Texas Legislature to order the Commission to find another site.[247]

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236. *See* Colglazier & English, *supra* note 227, at 220-21.

237. *See* BARLETT & STEELE, *supra* note 7, at 228-29.

238. *See* Colglazier & English, *supra* note 227, at 221.

239. *See id.*

240. *See* ENGLISH, *supra* note 41, at 15.

241. *See* Richard R. Zuercher, *Texas LLW Agency Negotiates for 16,000 Acres for Disposal Site,* NUCLEONICS WK., Jan. 23, 1992, at 15, *available in* 1992 WL 2460493.

242. *See* GERSHEY, *supra* note 5, at 131.

243. *See* Richard R. Zuercher, *Texas Postpones Talks with Maine, Vermont over Forming LLW Compact,* NUCLEONICS WK., Dec. 17, 1992, at 10, *available in* 1992 WL 2459329.

244. *See* Zuercher, *supra* note 227.

245. *See* GERSHEY, *supra* note 5, at 131.

246. *See* Zuercher, *supra* note 227.

247. *See* Rick Zuercher, *Texas LLW Group Back at Square One After State Bans Fort Hancock Site,* NUCLEONICS WK., July 11, 1991, at 10, *available in* 1991 WL 2443247. For the only published opinion of a case in which El Paso sought to challenge the siting process, see Texas Low-Level Radioactive Waste Disposal Authority v. County of El Paso, 740 S.W.2d 7 (Tex. App. 1987), in which the court vacated a temporary injunction that barred the state from proceeding with the site selection

In barring the Authority from siting the disposal facility near Fort Hancock, however, the Texas Legislature passed several pieces of legislation that made the Authority's job easier. For example, the Legislature defined an area comprising about 375 square miles in Hudspeth County in which the disposal facility could be located, this time with the support of the Governor, the Legislature, and El Paso County.[248] It also rescinded the 1988 statute that confined the Authority's search for potential site locations to public land, and gave the Authority limited power to exercise eminent domain over privately held land.[249] Soon the Authority was negotiating to buy a 16,000 acre tract known as "Faskin Ranch" within the statutorily-defined 375 square mile area.[250] Finally, the Texas Legislature tried to protect the Authority from future lawsuits that might delay or block construction of a LLRW facility at Faskin Ranch by passing a bill that required any action against the Authority pertaining to the site selection and licensing of a disposal facility to be brought in the courts of Travis County.[251] Most important from Maine's perspective, "[t]he legislature also cleared the way for Texas to enter into a compact with other states. The legislature rescinded a provision in the Texas LLW law that prohibit[ed] the state from accepting contaminated waste from other states."[252] It now began to look fairly

process until a trial court heard the merits of another action filed by El Paso County. *See id.* at 10. Although the Texas Authority won this battle and was allowed to continue with plans to utilize the Fort Hancock site, the County of El Paso ultimately won the war.

248. *See* Zuercher, *supra* note 247; TEX. HEALTH & SAFETY CODE ANN. § 402.0921 (West 1992). Many critics deem suspect the Texas Legislature's motives in defining the area in which the facility was to be located. One must wonder whether it is fair to define these boundaries based on what appears to have been purely political considerations. This topic will be developed more fully below. *See infra* notes 333-40 and accompanying text.

249. *See* Zuercher, *supra* note 247; TEX. HEALTH & SAFETY CODE ANN. § 402.0922 (West 1992).

250. *See* Zuercher, *supra* note 241. "The extreme northwest tip of the Faskin Ranch is only seven miles southeast of Sierra Blanca, the Hudspeth County seat," but the opposition to a nearby disposal facility was not "expected to be as intense as was El Paso County's opposition to the authority's proposed Fort Hancock site...." *Id.* Of course, opponents to the siting of the disposal facility at the Faskin Ranch argued that the site was picked because of "the powerlessness of Hudspeth County citizens — 'brown people who don't have much money (and) who have no political clout.'" *Rift Rattles Radioactive Waste Pact: Texans Argue Over Plan to Take Maine's Refuse,* BANGOR DAILY NEWS, May 12, 1995, *available in* 1995 WL 8760065. Whether Texas and Maine are guilty of "environmental racism" is an issue that will be taken up later. *See infra* notes 341-49 and accompanying text.

251. *See* Zuercher, *supra* note 247; TEXAS HEALTH & SAFETY CODE ANN. § 402.029(a) (West 1992). Travis County is the county in which Austin is located, and it is quite a distance from Hudspeth County. Whether the enactment of this statute was another act of "environmental racism" is an issue that will be taken up later. *See infra* notes 326-27 and accompanying text.

252. Zuercher, *supra* note 247.

certain that a compact would be formed between Maine, Vermont, and Texas.

After the Texas Authority settled on Faskin Ranch as the site for Texas's future LLRW disposal facility in the early nineties, Maine and Vermont renewed their previous offer to the Authority: In return for adopting compact legislation that would allow the two New England states to ship their waste to the Hudspeth facility, Maine and Vermont would help to finance the construction of the facility itself.[253] Maine and Vermont then proposed to pay Texas $50 million toward construction of the facility, and $2.5 million directly to Hudspeth County.[254] A Texas statute capped the amount of out-of-state waste that the state was allowed to accept for disposal each year at twenty percent of the average amount of waste produced annually by Texas.[255] That provision presented no problem for a Texas-Maine-Vermont compact because Maine and Vermont's combined output of LLRW fell well under the cap.[256] The Maine Legislature adopted the Texas Low-Level Radioactive Waste Disposal Compact in June, 1993, as an emergency measure in order to give the Secretary of State time to prepare the ballots for the statutorily-mandated November referendum.[257] The Texas Legislature

253. *See* Zuercher, *supra* note 243.

254. *See* Mike Ward, *Connecticut Offers Texas $100 Million to Take its Nuclear Waste,* AUSTIN AMERICAN-STATESMAN, Mar. 30, 1993, *available in* 1993 WL 6779759.

255. *See* TEX. HEALTH & SAFETY CODE ANN. § 402.219(c)(1) (West 1992 & Supp. 1996-1997).

256. *See Radwaste: Connecticut Offers Texas $100 Million to Accept Low-Level Radwaste,* HAZARDOUS WASTE BUS., Apr. 7, 1993, *available in* 1993 WL 2444903. As Texas legislators were considering adopting the proposed Texas Compact in 1993, the state of Connecticut surprised everyone by offering Texas $100 million to be included in the agreement. The offer was rejected, however, because Connecticut's output of LLRW by itself surpassed the statutorily-mandated cap. *See id.* By one estimate, Connecticut produced approximately 24,000 cubic feet of LLRW each year, compared with Texas's 60,000 cubic feet. By comparison, Maine and Vermont together produced about 12,000 cubic feet per year. *See Deep in the Heart of Texas, supra* note 16.

257. *See* P.L. 1993, ch. 400. As the Compact was being debated before the legislature, one senator discussed the reasons why the Compact should be adopted quickly:

> Governor Richards in Texas, the last word I had, had not yet signed the bill and we feel that passing this [bill adopting the compact] now at this time would be an indication to her that we are serious about wanting to do this .... The rush is that it [will] send the signal to Texas that the Maine Legislature has taken as much of an action as it possibly can at the present time because we want this to happen.

Legis. Rec. S-1078 (1993)(statement of Sen. Pearson). Other Maine legislators discussed the positive and negative aspects of the Texas Compact. For example, one senator remarked,

> I think it is extremely important, that as we go into any agreement that would transport radioactive waste out of the State of Maine into another State, that we do so with a full understanding of what our responsibilities

adopted the Texas Compact later that summer.[258] It was now up to the voters of Maine to decide whether Maine should ship its LLRW to Texas.[259] In Texas, there is no parallel to the statute in Maine which requires voter approval of the construction or operation of a disposal facility within the state, so its legislature's judgement was final.[260]

The Maine referendum on the Texas Compact was to be held Tuesday, November 2, 1993.[261] In the months before the vote, the debate intensified over whether it was ethical or sensible for Maine to ship its LLRW to Texas. Those opposed to the Texas Compact claimed that "it was unfair for Mainers to send their waste to another state where residents don't have the benefit of voting on the measure."[262] They claimed that the choice to site the disposal facility in Hudspeth County, where seventy percent of the residents are Hispanic, was "environmental racism," a political decision to take

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> are as a society and what we are imposing on that other State. I think it is extremely important that as we make these decisions that we do not have the attitude of out of sight, out of mind.... [T]he people who scream about the nimby attitude oftentime close their eyes when it comes time to pass it onto somebody elses [sic] back yard ....

Id. at S-1079 (statement of Sen. Titcomb). In the House, one representative spoke at length about potential problems with the Hudspeth site and the Compact itself. He argued that "the site chosen in Texas is an area of ... much poverty," and that "the people most affected [by the siting of the facility] have not been brought into the process as they have been in Maine." *Id.* at H-1222 (statement of Rep. Holt). He alleged that "Sierra Blanca was selected as the state's nuclear waste dumping ground 'for political reasons', not scientific ones," and that "it is wrong to send waste out of state[,] particularly to Texas where there is no real citizen involvement and no citizen vote." *Id.* Another representative responded, "The amount of public input people in Texas have is a matter for them to decide and not a matter for us to get concerned about[.] Texas can take care of [itself]." *Id.* at H-1223 (statement of Rep. Mitchell). He added that LLRW disposal facilities are

> much better sited in areas that are dry and arid because water is the pathway that will carry the radioactive waste from the facility out into the environment.... [T]he chances of [the Texas] site ever leaking are much ... less than they would be if you located a site in Maine. It just seems to me to be a much safer way to go, a much more environmentally sound way to go.

Id.

258. *See* TEX. HEALTH & SAFETY CODE ANN. §§ 403.001-403.006 (West Supp. 1996-1997).

259. *See* ME. REV. STAT. ANN. tit. 38, § 1492 (West 1989).

260. Vermont adopted the Texas Compact in 1993. *See* VT. STAT. ANN. tit. 10, § 7060 (1997). Vermont also does not have a requirement that its voters must approve the state's membership in an interstate compact for the disposal of LLRW.

261. *See* STATE OF MAINE ADVISORY COMMISSION ON RADIOACTIVE WASTE, VOTE YES ON QUESTION No. 6 (Sept. 1993) (informational brochure on Texas Low-Level Radioactive Waste Disposal Compact referendum) (on file with the Maine State Library).

262. David Sharp, *Texas Nuclear Waste Plan 'Environmental Racism,'* BANGOR DAILY NEWS, Oct. 27, 1993, *available in* 1993 WL 6333056.

the "path of least resistance,"[263] and they pleaded with Maine to "do the right thing" by rejecting the compact. On the other side of the debate, those who supported the Texas Compact pointed out that the decision to construct a LLRW disposal facility in Hudspeth County was a decision of the Texas Legislature and was out of Maine's hands. According to Maine Public Advocate Stephen Ward: "With or without Maine, Texas is going ahead with the site. A vote against the compact by Mainers will not kill the project."[264] Recalling the water problems encountered by the New York, Kentucky, and Illinois sites in the seventies, the supporters claimed that the dry climate of Hudspeth County was much more environmentally safe for a LLRW facility than Maine. In the end, on November 2, voters approved the Texas Compact by a resounding margin.[265] Once Vermont's Legislature acted to adopt the Compact, it would be up to the United States Congress to give its approval to the Texas-Maine-Vermont agreement.

B. The Texas Low-Level Radioactive Waste Disposal Compact

The Texas Low-Level Radioactive Waste Disposal Compact as adopted by Maine defines its party states as Texas, Maine, and Vermont.[266] In Article I of the Compact, it provides that "[i]t is the policy of the party states to cooperate in the protection of the health, safety, and welfare of their citizens and the environment and to provide for and encourage the economical management and disposal of low-level radioactive waste."[267] The purpose of the Compact is

> to provide the framework for such a cooperative effort; to promote the health, safety, and welfare of the citizens and the environment of the party states; to limit the number of facilities needed to effectively, efficiently, and economically manage low-level radioactive waste and to encourage the reduction of the generation thereof; and to distribute the costs, benefits, and obligations among the party states. . . .[268]

Other important terms defined by the Compact include "host state" (Texas), and "low-level radioactive waste" (with the same definition as given by the LLRWPAA or by Texas statute, "so long as the

263. *See id.*

264. Ned Porter, *Texans Speak Out on Receiving Maine N-Waste,* BANGOR DAILY NEWS, Oct. 5, 1993, *available in* 1993 WL 6331115.

265. *See* Ned Porter, *Maine Emphatic in Vote to Export Nuclear Waste,* BANGOR DAILY NEWS, Nov. 4, 1993, *available in* 1993 WL 6443880.

266. *See* Texas Low-Level Radioactive Waste Disposal Compact [hereinafter Texas Compact], § 2.01(13) (The text of the Texas Compact is found at P.L. 1993, ch. 400, § 4).

267. *Id.* § 1.01.

268. *Id.*

waste is not incompatible with management and disposal at the compact facility").[269]

Article III of the Compact establishes the Texas Low-Level Radioactive Waste Disposal Compact Commission, consisting of one voting member from each party state, except Texas, which as host state, is entitled to six voting members.[270] The duties of the Commission include the preparation of contingency plans for the disposal and management of LLRW in the event that the compact facility is forced to close, but those plans cannot require any non-host party state to store its generators' LLRW.[271] The Commission is also required to estimate the total volume of LLRW to be deposited in the host facility by the host state between 1995-2045, and based on this estimate, the total amount of waste imported from non-host states will be capped at twenty percent of the total volume to be disposed.[272] The Commission may sue and be sued,[273] but Commission members are not personally liable for their official acts, and the "liabilities of the commission shall not be deemed liabilities of the party states."[274] In addition, with a majority vote, the Commission may enter into an agreement with another state or entity for the importation of LLRW for disposal in the host-state facility, or may allow the host state or any generators to export LLRW to a disposal facility outside the party states.[275]

Article IV defines the rights, responsibilities, and obligations of the party states. Perhaps most importantly, the Compact provides that "[t]he host state shall develop and have full administrative control over the development, management and operation of a facility for the disposal of low-level radioactive waste generated within the

269. *See id.* §§ 2.01(8), (10).

270. *See id.* § 3.01. The Compact is designed to guarantee that the host state shall always have enough votes to constitute a majority of the Compact Commission. *See id.* § 7.03. In the event that an additional state or states join the compact, the host state is allowed to "modify the composition of the commission so that the host state shall have a voting majority," without the consent of the other party states. *See id.* In most cases, an official act of the Compact Commission requires majority approval. *See id.* § 3.02.

271. *See id.* § 3.04(7). In addition, if the host state proposes to store or manage out-of-state waste as opposed to providing permanent disposal, the plan must be approved by at least four host state members of the Commission. *See id.*

272. *See id.* § 3.04(11); *see also* TEX. HEALTH & SAFETY CODE ANN. § 402.219(c)(1) (West 1992); *infra* notes 305-06 and accompanying text. The Commission was also in charge of coordinating the volumes, timing, and frequency of shipments to meet the cap requirement. *See* Texas Compact, *supra* note 266, § 3.04(11). The host state was given the authority to modify the provisions of this section according to its state law, as long as by doing so it did not "impair the rights of the initial non-host party states [Maine and Vermont]." *See id.* § 7.09.

273. *See* Texas Compact, *supra* note 266, § 3.05(5).

274. *Id.* § 3.03.

275. *See id.* §§ 3.05(6)-(7).

party states."[276] In other words, Maine and Vermont are given no control over where the facility is located or how it is operated. It is the host state's duty to make sure that a disposal facility exists throughout the institutional control period,[277] and to "[e]nsure . . . the protection and preservation of the environment and the public health and safety in the siting, design, development, licensing, regulation, operation, closure, decommissioning, and long-term care of the disposal facilities within the host state."[278] In addition, the host state is required to establish reasonable fees to be charged for the disposal of LLRW.[279] LLRW generated within the party states is required to be disposed in the host facility, and the party states are contractually forbidden from joining another compact.[280]

It is the duty of each party state to "[d]evelop and enforce procedures requiring low-level radioactive waste shipments originating within its borders and destined for the facility to conform to packaging, processing, and waste form specifications of the host state."[281] Each party state must create and maintain a registry of its LLRW generators and the amount and class of LLRW it produces, as well as provide the Compact Commission and the host state with an accounting of LLRW shipped and proposed to be shipped, proposed transportation routes and methods, and proposed schedules of shipments.[282] Procedures for minimizing the amount of LLRW to be deposited in the host state facility are to be developed and enforced by each party state, and these procedures may include storage, treatment or management of waste by its generators.[283] Each party state is also bound to "[s]eek to join in any legal action by or against the host state to prevent nonparty states or generators from disposing of low-level radioactive waste at the facility."[284] Finally, every party state is required to act in good faith with respect to the requirements of the Compact, and each may depend on the other party states to do the same.[285]

Article V of the Compact discusses the monetary contributions required as consideration for Compact membership. It mandates that "[e]ach party state, except the host state, shall contribute a total

276. *Id.* § 4.01.
277. *See id.* § 4.04(1).
278. *Id.* § 4.04(2).
279. *See id.* § 4.04(4). Whether a fee is "reasonable" is determined according to disposal fee criteria established by statute. *See* TEX. HEALTH & SAFETY CODE ANN. §§ 402.272, 402.273 (West 1992). The host state was required to charge the same fees for LLRW generated in the host state and in the other party states. *See* Texas Compact, *supra* note 266, § 4.04(4).
280. *See* Texas Compact, *supra* note 266, §§ 4.02, 4.03.
281. *Id.* § 4.05(1).
282. *See id.* §§ 4.05(2), (8).
283. *See id.* § 4.05(3).
284. *Id.* § 4.05(9).
285. *See id.* § 4.06.

of $25 million to the host state."[286] The method and the schedule of payment is also set forth in Article V.[287] Another section of the Compact provides that each non-host party state must "[p]ay for community assistance projects designated by the host county in an amount for each non-host party state equal to 10 percent of the payment provided for in Article V for each such state."[288]

Article VI is designed to give the operator of the disposal facility a monopoly on LLRW disposal among the party states. Under this Article, no person is allowed to dispose of LLRW generated in the party states anywhere except the host facility, nor may any person dispose of or manage LLRW within the party states unless it is also generated within the party states.[289] The Commission was given authority to determine the appropriate punishment for a violation of these provisions, which could result in "prohibiting the violator from disposing of low-level radioactive waste in the compact facility, or in the imposition of penalty surcharges on shipments to the facility."[290]

Under Article VII, the Texas Compact is to take effect "following its enactment under the laws of the host state and any other party state and thereafter upon the consent of the United States Congress and shall remain in effect until otherwise provided by federal law."[291] The Texas Compact is subject to review and withdrawal of consent by Congress every five years after initial ratification.[292] Article VII also contains provisions concerning the procedure and consequences of a party state withdrawing from the Compact,[293] and requires seven out of eight votes of the Commission to revoke a state's membership in the Compact for failure to meet the Compact's terms.[294] Also, any other state may be made eligible to join the Texas Compact by a majority vote of the Commission, provided it meets the terms of the Compact, and provided the host state legislature approves of its entry.[295] "The host state may establish all

286. *Id.* § 5.01.

287. *See id.* §§ 5.01, 5.02.

288. *Id.* § 4.05(5).

289. *See id.* §§ 6.01, 6.02. Note that sections 3.05(6) and 3.05(7) allow the Commission to enter into an agreement that would otherwise violate this provision.

290. *Id.* § 6.03.

291. *Id.* § 7.07. *See also* U.S. CONST. art. I, § 10 ("No State shall, without the Consent of Congress . . . enter into any Agreement or Compact with another State . . . ."); 42 U.S.C. § 2021d(c)(2) (1994).

292. *See* Texas Compact, *supra* note 266, § 7.08. *See also* 42 U.S.C. § 2021d(d) (1994).

293. *See* Texas Compact, *supra* note 266, §§ 7.03, 7.04, 7.05.

294. *See id.* § 7.06. In order to revoke a state's membership, proper notice and hearing must be given. Section 7.06 provides the basic procedure for a revocation hearing. *See id.*

295. *See id.* § 7.01.

terms and conditions for the entry of any state, other than [the original party states], as a member of this compact . . . ."[296]

Article VIII provides "[t]he provisions of this compact shall be broadly construed to carry out the purposes of the compact, but the sovereign powers of a party shall not be infringed upon unnecessarily."[297] It also defines the liabilities of all interested parties:

> No party state acquires any liability, by joining this compact, resulting from the siting, operation, maintenance, long-term care or any other activity relating to the compact facility. No non-host party state shall be liable for any harm or damage from the siting, operation, maintenance, or long-term care relating to the compact facility. . . . Generators, transporters, owners and operators of facility [sic] shall be liable for their acts, omissions, conduct or relationships in accordance with applicable law.[298]

Finally, Article VIII contains provisions designed to escape judicial invalidation of the Texas Compact under the Supremacy Clause, and to escape invalidation of the entire Compact should one provision be struck down.[299]

Thus, under the terms of the Compact, Maine will be allowed to ship a certain amount of LLRW (which, together with the waste shipped by Vermont, may not exceed twenty percent of the waste produced by Texas) for disposal at the Hudspeth facility for the thirty-year life of the facility.[300] In return, Maine will be charged $27.5 million in return for compact membership, and generators will be charged "tipping fees" based on the volume of waste they dispose.[301] This money will come from Maine's LLRW generators rather than its taxpayers,[302] with Maine Yankee responsible for the majority of the cost. Under the Compact, Maine generators are encouraged to minimize the volume of LLRW for disposal at the facility through storage or treatment, but are not allowed to dispose of their LLRW anywhere but the host facility. Maine will be immune from any liability resulting from the siting, operation, or maintenance of the disposal facility, but its generators and shippers will be liable for their acts in accordance with the applicable law. Maine will be expected to join any legal action by or against Texas, how-

296. *Id.*

297. *Id.* § 8.01.

298. *Id.* § 8.03.

299. *See id.* §§ 8.05-39.07 (section 39.07 is an apparent typographical error and this should be section 8.07).

300. According to Maine State Representative Holt, Maine is guaranteed about 300,000 cubic feet of disposal space at the Texas Facility. This represents less than one half of the space needed by Maine Yankee when it is decommissioned in 2008. *See* Legis. Rec. H-1222 (1993) (statement of Rep. Holt).

301. Again, according to Representative Holt, the tipping fees will be about $450 per cubic foot. *See id.*

302. *See* ME. REV. STAT. ANN. tit. 38, § 1545 (West Supp. 1996-1997).

ever, to enforce the Compact's exclusionary power by preventing non-compact states or their generators from using the disposal facility. In order to comply with the terms of the Compact, Maine must ensure that shipments of LLRW to the facility conform with the host state's requirements, and must provide the Compact Commission with (1) an accounting of volumes shipped and planned to be shipped, (2) proposed transportation routes and methods, and (3) a schedule of future shipments.

C. Evaluation of the Texas Compact

While Maine was negotiating with Texas in the hope that a compact would be agreed upon, it was simultaneously going through the painful process of searching for a suitable site for a disposal facility within the state. Like Texas, Maine was experiencing difficulties with the NIMBY syndrome, but in Maine the siting process was more susceptible to those difficulties. The most significant hurdle that had to be overcome by the Maine Low-Level Radioactive Waste Authority (responsible for Maine's siting process) was a statutorily-mandated election to be held within sixty days of the final selection of a disposal facility site.[303] The election was to be held in the municipality in which the proposed facility was to be located.[304] The applicable statute stated: "Unless 60% of the voters casting ballots in the election approve of the authority's site location decision, the authority shall not locate the facility within the municipality . . . ."[305] In addition, the proposed facility needed to be approved by the state legislature,[306] as well as by the voters in a state-wide election.[307] As one would expect, it was difficult to convince sixty percent of a municipality's voters that they would be benefited by a LLRW disposal facility operating within their town. Therefore, the Maine Authority was not successful in the siting process. With the approval of the Texas Compact, however, the Maine Low-Level Radioactive Waste Disposal Authority could suspend its search for a disposal facility location, and was thus disbanded on July 1, 1994.[308]

Proposed federal legislation ratifying the Texas Compact was introduced before the United States Senate on June 21, 1994,[309] but as

303. *See* P.L. 1987, ch. 530, § 4, *repealed by* P.L. 1993, ch. 664, § 19.

304. *See id.*

305. *Id.*

306. *See* ME. REV. STAT. ANN. tit. 38, § 1479 (West Supp. 1996-1997).

307. *See id.* § 1493.

308. *See* 1993-1994 ME. OFF. OF PUB. ADVOC. ANN. REP. at 1. *See also* P.L. 1993, ch. 664, § 19.

309. *See* 1993-1994 ME. OFF. OF PUB. ADVOC. ANN. REP., *supra* note 308, at 22. The bill (identified as S-2222) was cosponsored by senators from Maine and Vermont. The House Bill was cosponsored by Texas representatives, but Maine Representative Olympia Snowe served as lead sponsor. *See id.*

of yet has not been voted into law.[310] Federal legislators are divided on the issues of whether the Texas Compact satisfies the LLRWPAA and whether the Compact is good policy for the nation. Lobbying against the ratification of the Compact are representatives of many Texans, especially those living in Hudspeth County, who resent the fact that they are being forced to shoulder the burden of living near a LLRW disposal facility in which waste from Maine and Vermont will be dumped. Although Mainers were allowed to vote on whether to send their waste to another state (the outcome being fairly predictable), Texans were not given the opportunity to vote on whether to accept that waste; many Texans feel unfairly put upon by a state only too willing to take advantage of differing decision-making processes. And many Mainers continue to wonder whether it will be ethical, or even sensible, to send Maine LLRW to Texas.[311]

1. Positive Aspects of the Texas Compact

There is no doubt that the Texas Compact offers many benefits to the party states, to Texas itself, and to the nation as a whole. From Maine's perspective (and Vermont's), perhaps the most important positive aspect of the Texas Compact is that it represents a long-awaited *solution* to the problem of LLRW disposal. As documented above, Maine has been searching for a dependable disposal facility in which to safely dispose of its LLRW since the enactment of the LLRWPA in 1980. During much of the eighties, Maine seemed destined to remain independent, and had trouble meeting the requirements of the LLRWPAA due to Maine's uncertain future and the difficulty it was facing in siting a disposal facility within the state. Had the prospect of the Texas Compact not arisen as the January 1, 1993, cutoff date approached, Maine's LLRW generators would likely have been in a panic, without a disposal facility to which they could ship their waste, and without the power, since *New York v. United States*, to compel the state to take title to that waste. Instead, Maine was fairly sure that the Texas Compact would be adopted by both states, and so it could channel its energy into negotiations aimed at this potential solution. This was much more politically attractive than continuing the search for a Maine community willing to host a disposal facility. Thus, the fact that Maine finally has a "plan" that it can point to is certainly very significant. If the Texas Compact were ratified by Congress, no longer would Maine be forced to worry about how it will dispose of its generators' LLRW; no longer would it be forced to go through a long and painful siting process, searching for potentially suitable sites, yet suspecting that

310. *See* ME. OFF. OF PUB. ADVOC., Q. REP. July - Sept. 1996, at 6.

311. *See* DELOGU, *supra* note 28, at 757 n.11 ("[t]he reader must determine the ethics of imposing Maine generated wastes . . . on the residents of another state").

ultimately, no matter how suitable the site, the local voters would reject it.

Another positive aspect of the Texas Compact is the undisputed fact that, no matter where the facility is ultimately located within Texas, the physical characteristics of nearly any Texas site are far superior to any site in Maine. The official NRC guidelines for the siting of a low-level radioactive waste disposal facility are produced in the Code of Federal Regulations and provide: "The disposal site must provide sufficient depth to the water table that ground water intrusion, perennial or otherwise, into the waste will not occur."[312] Past experience teaches that "[t]he three commercial sites closed [in the seventies] were in the humid region of the country. The technical results and problems at all three sites were similar, in that they . . . allowed water to infiltrate and collect in the trenches."[313] Based on this criteria, it becomes clear that, objectively, it makes more sense to construct and operate a disposal facility in Texas than in Maine.

> In Texas, the water table is nearly 800 feet down; in Maine it's closer to three feet. Annual rains amount to about 10 inches in the desert basin; in Maine it's about 40 inches. [In Texas, r]ain water evaporates long before it can reach the water table; in Maine it can filter down in as little as a day.[314]

Although "[s]uch comparisons . . . do little for the residents of Sierra Blanca,"[315] it is certain that Texas is the better-suited state to host a disposal facility.

A positive benefit enjoyed by all three party states and enjoyed especially by Texas is the fact that, should Congress ratify the Compact, each state will be granted exclusionary authority under the LLRWPAA; each state can prohibit the import of LLRW across its borders. In Maine and Vermont, one reason a disposal facility was never constructed was that as long as each state remained independent there was no guarantee that a facility could be used exclusively for that state's waste. In Texas, a major concern since the enactment of the LLRWPA in 1980 and the subsequent decision to construct a state disposal facility has been whether the state would be able to

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312. Disposal Site Suitability Requirements for Land Disposal, 10 C.F.R. § 61.50(a)(7) (1996).

313. Frank L. Parker, *Low-Level Radioactive Waste Disposal, in* LOW-LEVEL RADIOACTIVE WASTE REGULATION, *supra* note 2, at 85, 97. *See also* Jacobs & Rose, *supra* note 37, at 65 ("Several of the more serious technical problems in shallow land burial are related to water management. . . . [I]n humid regions, water levels in the trenches may rise and come into contact with the waste."); *supra* notes 52-58 and accompanying text.

314. Ned Porter, *Should Maine Dump Its Nuclear Waste in Texas? Mainers Choose Sides in Compact Debate,* BANGOR DAILY NEWS, Oct. 25, 1993, *available in* 1993 WL 10442126.

315. *Id.*

confine the use of the facility exclusively to Texas waste.[316] If Congress ratifies the Texas Compact, Texas will have the authority to restrict the use of its disposal facility to LLRW generated within Texas, Maine, and Vermont. Although Texas must accept some out-of-state waste under this agreement, Maine and Vermont produce relatively small amounts of LLRW, and Texas is assured that it will not be forced to accept large amounts of waste from out-of-state.[317]

A final positive aspect of the Texas Compact from a national perspective is that it calls for one disposal facility to be shared by three states, rather than three disposal facilities, each serving one of the three states. In 1981, the DOE suggested that six regional facilities were all that was necessary to serve the nation's disposal needs, and legislators who passed the 1980 LLRWPA envisioned six or seven sites across the nation.[318] According to one commentator, since the early eighties the volume of waste produced by the United States has decreased by fifty percent.[319] "Correlating the DOE estimates to this reduced volume, it appears that three LLRW facilities would serve the country's needs adequately."[320] With nine regional compacts in existence, one compact awaiting ratification, and four remaining independent states, it is conceivable that eventually fifteen disposal facilities could spring up across the country.[321] This proliferation of disposal sites that has occurred under the LLRWPAA is a fundamental problem with the federal legislation. At this point, it is in the nation's best interest to limit the number of

316. *See* BARLETT & STEELE, *supra* note 7, at 228.

317. Of course, this argument assumes that Texas will *want* to limit out-of-state waste to that produced in Maine and Vermont. Skeptics point out that the Texas Compact contains provisions allowing the Commission, with a majority vote, to enter into an agreement with another state or entity for the importation of LLRW for disposal at the Faskin Ranch site. *See* Texas Compact, *supra* note 266, § 3.05(6). Texas, with a majority of votes in the Compact Commission, effectively controls this decision, and Compact opponents believe that with the abundance of incentives that could be offered by states with LLRW disposal shortages, it is only a matter of time before Faskin Ranch becomes a dumping site for the nation. *See* Sandra Carreon Griffin, Editorial,... *But Will Border Become Nation's Dump?* AUSTIN AMERICAN-STATESMAN, May 23, 1994, at A11.

318. *See* BARLETT & STEELE, *supra* note 7, at 220.

319. Contreras, *supra* note 7, at 521-22.

320. *Id.*

321. The 15 potential disposal facilities consist of the five independent states (each with its own disposal facility), plus the nine existing compacts (one of which, the Northeast Compact, comprised of Connecticut and New Jersey, plans to open two disposal facilities). *See* ENGLISH, *supra* note 41, at 13. Jorge Contreras notes three major problems associated with a surplus of disposal facilities. First, with too many sites across the country, individual sites will not receive enough waste to be able to achieve economies of scale and the resulting cost ultimately charged to generators will be higher. Second, with so many sites across the nation, it is certain that some sites will be located in areas that are physically inadequate to host a disposal facility. Third, and probably most obvious, the more sites there are, the more likely it is that an accident will occur somewhere. Contreras, *supra* note 7, at 522.

new facilities to be constructed. Thus, the Texas Compact, which relieves Maine and Vermont of the duty of building two more facilities, can be looked upon as an agreement that benefits the nation.

2. *Negative Aspects of the Texas Compact*

a. From Texas's Perspective

From Texas's perspective, there are many negative aspects related to the Texas Compact, all concerning the siting of the disposal facility in Hudspeth County. Of course, it should again be recognized that the Texas Compact itself has nothing to say about the siting of the disposal facility; the decision is left entirely in the hands of the Texas Legislature. But if the Texas Compact becomes law, it will follow that the Faskin Ranch site will begin accepting LLRW from Maine and Vermont, and many argue that the Texas Legislature encouraged and approved use of the Faskin Ranch site in bad faith. Thus, the problems with how Texas underwent the siting process must be of concern to Maine, if only because Maine knows that the people of Hudspeth County do not want Maine's waste to be deposited in their backyard. Mainers should at least recognize the arguments made by those Texas citizens who oppose the siting of a regional facility in their state, and perhaps this information will cause them to reconsider their own position on the Texas Compact.

One major reason many Texans are angry about the siting of a disposal facility in Hudspeth County is that they were never allowed to vote directly on the issue, while citizens of Maine were given the chance to vote, not only against the siting of a facility in their state, but on whether to send their LLRW to Texas. Texans not only resent the fact that Mainers seemed all too willing to send waste generated in Maine to another state's backyard, but they also resent the fact that they were not given the chance to voice their opinion on whether to reject the importation of that waste. Most of the people of Hudspeth County oppose the Faskin Ranch site. In 1993, a survey by the Texas Authority estimated that sixty-three percent of Hudspeth County's residents did not want the dump, and some felt that the estimate was far too low.[322] Local opposition to the Faskin Ranch site was strong at the only public hearing held by the state on the subject,[323] despite critics' observations that "[n]otices of hearings are in English only, while 70 percent of the county's population is Spanish-speaking."[324]

Politicians and experts debate about whether allowing citizens to vote on the siting of a LLRW disposal facility is good policy. While

322. *See* Porter, *supra* note 314.

323. *See id.*

324. David Gram, *Texas Nuclear Waste Siting Draws Little Protest From Vermont Activists,* BANGOR DAILY NEWS, Dec. 13, 1993, *available in* 1993 WL 6451735.

some might say that our democratic system mandates that the affected public must be able to vote directly on such important subjects as the siting of a waste disposal facility in their area, others maintain that allowing such direct public participation does more harm than good.[325] Texas had certainly experienced major difficulties with the NIMBY syndrome in the eighties when it was forced to reject two proposed sites because of public protest. Therefore, it might argue, allowing citizens to vote on the siting of a disposal facility could have precluded a site from ever being found. This argument, however, fails to realize that public opposition to the siting of LLRW disposal facilities stems largely from lack of information and mistrust of siting authorities. By opening up the process, sharing information, and providing some forum through which the public could have expressed its opinion, Texas might have fostered trust among its citizens. Instead, a chance to vote and most other potential forums for opposing the Faskin Ranch site were effectively foreclosed by the state government, a decision that seems to have fueled the NIMBY fires in Hudspeth County.

One avenue for voicing opposition to the Faskin Ranch site that was effectively barred by the Texas government was the alternative of filing an action in state court for injunctive relief. As noted above, the Texas Legislature prohibited the filing of a complaint against the Texas Authority that was related to the siting of a disposal facility in *Hudspeth* County unless the lawsuit was filed in *Travis* County. Travis County is about three hundred miles from Hudspeth County. The people of Hudspeth County are the most likely parties who would object to the Faskin Ranch site, but they have little political clout,[326] little money,[327] and little understanding of the judicial system. They would have enough trouble with the courts in their *own* county, but if they wanted to exercise their right to seek judicial review of the siting process, they were required to find the money and the means to travel across the state to do so. There is little

325. For example, Richard J. Bord notes that "[p]ublic intervention into decisions concerning risky technologies is generally viewed positively in light of our democratic norms and the ample history of corporate and government insensitivity to issues of public health and safety." Richard J. Bord, *The Low-Level Radioactive Waste Crisis: Is More Citizen Participation the Answer? in* LOW-LEVEL RADIOACTIVE WASTE REGULATION, *supra* note 2, at 193, 193. Yet Bord goes on to discuss problems with allowing too much public participation in issues such as LLRW disposal. For example, he cites evidence that when commonly misunderstood technology is at issue, and when the public "perceives a lack of expert consensus about the risks of that technology," allowing public participation may result in *increasing* opposition. Richard J. Bord, *Problems in Siting Low-Level Radioactive Wastes: A Focus on Public Participation, in* MANAGEMENT OF RADIOACTIVE MATERIALS AND WASTES, *supra* note 37, at 189, 194.

326. *See Maine Nuclear-Waste Export a 'Tough Setback' for Texans,* BANGOR DAILY NEWS, Nov. 4, 1993, *available in* 1993 WL 6443892.

327. *See* Sharp, *supra* note 262.

doubt that the Legislature's purpose in requiring lawsuits against the Authority to be brought on the other side of the state was to silence, as much as possible, the voices of Hudspeth County's protestors.

The opposition to any LLRW disposal facility is often based on exaggerations and misperceptions of the risks presented by such a facility, and the Texas situation is no different. It has already been noted that living next to a LLRW dump poses less danger than everyday activities such as driving a car or swimming. It has also been noted, however, that the public's exaggerated fear of anything associated with radioactivity stems partly from the fact that the public perceives the matter to be out of its hands. The Texas Legislature's decision to make the filing of a lawsuit against the Texas Authority almost impossible not only took the LLRW disposal issue out of the public's hands, it placed it well beyond their grasp. Again, it must be emphasized that by forcing the Faskin Ranch site on the people of Hudspeth County without any effective discourse on the subject, and therefore without consideration of the citizens' views, the Texas government increased the public's fears and made the problem worse.

While citizens of Texas have challenged the process by which the Faskin Ranch facility was sited, so too have they challenged the result that the process reached. In other words, because the siting process was skewed by political considerations, and because it ignored technical criteria, opponents argue that the site that was ultimately chosen is unsuitable for a LLRW disposal facility. For example, according to anti-Compact campaigner Bill Addington, a third-generation resident of Sierra Blanca, "[t]he proposed dump site sits directly over the West Texas Bolson Aquifer, the sole precious source of drinking water for the entire region."[328] He continues, "[t]his is very possibly one of the worst places where anyone could propose to bury nuclear waste in the whole state of Texas."[329] In addition, Compact opponents argue that the Hudspeth County site sits atop a fault line and is prone to earthquakes.[330] They cite a 1931 earthquake measuring 6.0 on the Richter scale that struck Valentine, about sixty miles from Faskin Ranch, and another quake in 1995 measuring 5.6 on the Richter scale that struck Alpine, about 125 miles away, followed about three months later by a 3.5 magnitude aftershock.[331] The Texas Authority, however, assures skeptics that the chances of a major earthquake occurring near the site are minimal, and that the site will be built using concrete canisters designed to withstand any quake that could strike the area.[332]

328. Porter, *supra* note 264.
329. *Id.*
330. *See* Gamboa, *supra* note 170.
331. *See id.*
332. *See id.*

Another question that has been raised about the siting of the proposed Faskin Ranch disposal facility is whether it was in accordance with the applicable NRC regulations, with the LLRWPAA guidelines, and with Texas statute. Challengers of the Faskin Ranch site argue that the decision to put the facility in a 375 square mile section of Hudspeth County was motivated solely by political reasons rather than scientific and technological criteria. In effect, the Texas Legislature ignored safety and environmental considerations to site the facility in an area where the locals would not (or perhaps *could* not) object. Bill Addington, campaigning in Maine against the Texas Compact, argued: "[T]his is a political issue. Science and technology have nothing to do with it. . . . Politicians picked the site and then asked scientists to prove it [was suitable]."[333] To support their contention, opponents merely cite the relevant siting regulations. The applicable NRC guidelines provide "[t]he primary emphasis in disposal site suitability is given to isolation of wastes, a matter having long-term impacts, *and to disposal site features that ensure that . . . long-term performance standards . . . are met, as opposed to short-term convenience or benefits.*"[334] The LLRWPAA advises that each state or region's plan for siting a disposal facility should call for "screening for *broad* siting areas."[335] And Texas statutes require the Authority to "determine the areas of the state *that are relatively more suitable than others for low-level waste disposal activities*,"[336] considering such factors as geology, topography, transportation, access, meteorology, population density, surface and subsurface hydrology, and flora and fauna.[337]

Yet, when the Texas Legislature rejected the Texas Authority's second recommended location for the proposed disposal facility (the Fort Hancock site), the Legislature granted the Authority some concessions, including a new statute providing "[n]otwithstanding any other law or other provision of this chapter, the board shall select as the disposal site, a site . . . within Hudspeth County, Texas," and within the 375 square mile boundary.[338] Obviously, this decision was not based on a finding that the 375 square mile site was better suited to a disposal facility. It was made long before any siting study had been done. Instead, it must have been based on a strategic decision; this was the area of the state where political opposition to the

333. John Hale & Ned Porter, *Scramble Begins for Votes; Term-Limits Proposal May Face Tight Race,* BANGOR DAILY NEWS, Oct. 30, 1993, *available in* 1993 WL 6333320 (alteration in original).

334. Disposal Site Suitability Requirements for Land Disposal, 10 C.F.R. § 61.50(a)(1) (1996) (emphasis added).

335. 42 U.S.C. § 2021e(e)(1)(B)(iii) (1994) (emphasis added).

336. TEX. HEALTH & SAFETY CODE ANN. § 402.081 (West 1992) (emphasis added).

337. *See id.* § 402.082.

338. *Id.* § 402.0921.

site would be the least. In that respect, the siting procedure certainly violated the spirit of the above cited laws. To use the language provided by the NRC, the Texas Legislature chose short-term convenience over long-term performance standards. Nevertheless, when a local group called Alert Citizens for Environmental Safety filed a lawsuit to make this argument before a Federal District Court, seeking an injunction to prohibit the construction of a Faskin Ranch waste dump,[339] the court dismissed the complaint in an unpublished opinion.[340] This decision comes as no surprise because, realistically, the above-cited statutory language was probably not intended to have any substantive effect. But it should be recognized that, by choosing the location for its site for political rather than technical reasons, and by making that choice without regard to the choice the citizens would have made, Texas lost the trust of the people of Hudspeth County.

Closely related to the problem of siting the facility for political rather than technical reasons are the charges made by many Faskin Ranch and Texas Compact opponents that the Texas Authority is guilty of "environmental racism."[341] Environmental racism can be defined as "the practice of placing toxic waste and other environmental hazards at sites in neighborhoods primarily populated by people of color."[342] This concept is based on studies that show a pattern of disproportionate concentrations of noxious sites such as hazardous waste dumps in minority communities.[343] Hudspeth County is about seventy percent Hispanic,[344] and, as already noted, a very poor community. In addition to a future LLRW disposal facility at Faskin Ranch, Hudspeth County is also the home of Mile High Ranch, a dumping ground for New York City Sewage Sludge

339. *See* Legis. Rec. H-1221-22 (1993) (statement of Rep. Holt). *See also* Porter, *supra* note 314.

340. *See* 1993-1994 ME. OFF. OF PUB. ADVOC. ANN. REP., *supra* note 308, at 21.

341. *See* Sharp, *supra* note 262. Before the 1993 Maine referendum on the Texas Low-Level Radioactive Waste Disposal Compact, several Maine groups banded together to campaign against the Compact because of their belief that it promoted environmental racism. The Center for Vision and Policy, We the People of Maine, Maine Veterans for Peace, the Committee for a Safe Energy Future, Maine Greens, Black Education and Cultural History, and the Maine branch of the National Association for the Advancement of Colored People voiced their opposition to the Texas Compact based on charges of racism. *See id.*

342. Carolyn M. Mitchell, *Environmental Racism: Race as a Primary Factor in the Selection of Hazardous Waste Sites,* 12 NAT'L BLACK L.J. 176, 176 (1993).

343. *See id.* at 176-77. *See also* Paul Mohai & Bunyan Bryant, *Environmental Injustice: Weighing Race and Class as Factors in the Distribution of Environmental Hazards,* 63 U. COLO. L. REV. 921, 925-27 (1992) ("[T]he findings from these studies indicate clear and unequivocal . . . racial biases in the distribution of environmental hazards.").

344. *See* Sharp, *supra* note 262.

just west of Sierra Blanca.[345] The political path of least resistance, taken by the Texas Legislature in siting its LLRW facility, often leads to communities similar to Sierra Blanca in regions like Hudspeth County.[346]

Some proponents of the Faskin Ranch site suggest that the promise of future jobs for this poverty-stricken community makes the imminent construction of the disposal facility desirable. The facility will provide about thirty-five permanent jobs for residents of Hudspeth County, and about one hundred employees will be needed to construct the facility.[347] Others argue that the promise of jobs is illusory since locals will be hired for the menial, low-paying, unsteady positions while the real task of managing the facility will be performed from the city of Austin.[348] Furthermore, skeptics note that "[t]he trade-off between environmental protection and bringing jobs to an impoverished community has often been labeled 'environmental blackmail.' Industrial polluters and municipalities often join forces to offer minority, low-income communities the prospects of jobs if they agree to accept potentially harmful wastes."[349]

b. From Maine's Perspective

From Maine's perspective, there are few drawbacks to the Texas Compact other than the ethical problems associated with sending radioactive waste to Sierra Blanca. One problem identified by opponents of the Texas Compact is the potentially astronomical "tipping fees" that Maine generators will be forced to pay for each cubic foot of LLRW they ship the facility. The effect of the LLRWPAA, as noted above, will be to create anywhere from nine to fifteen LLRW disposal facilities across the country, when the disposal needs of the country could probably be met adequately by three such facilities.[350] Because the same volume of waste will be divided among this surplus of disposal facilities, it will be impossible for each facility to achieve an economy of scale making it difficult for some facilities to cover their fixed costs. Consequently, site opera-

345. *See* Barry Shlachter, *Sewage Sludge From East Coast Finding a Home in Rural Texas,* SAN FRANCISO CHRON., Aug. 16, 1994, at A6.

346. *See* Mohai & Bryant, *supra* note 343, at 924 (citing ROBERT D. BULLARD, DUMPING IN DIXIE: RACE, CLASS AND ENVIRONMENTAL QUALITY 4 (1990)).

347. *See Maine Nuclear-Waste Export a 'Tough Setback' for Texans, supra* note 326.

348. *See* Bryan Woolley, *Poor Texas Town Weighing Impact of Dump Site,* NEW ORLEANS TIMES-PICAYUNE, Sept. 29, 1996, at A16.

349. Mitchell, *supra* note 342, at 178.

350. *See* Contreras, *supra* note 7, at 521-22. *But see* Gamboa, *supra* note 170 (attributing increased tipping fees to excess demand).

tors will be forced to charge high tipping fees on the minimal volume they receive.[351]

Present tipping fees have increased from ten dollars per cubic foot to about three hundred to four hundred dollars per cubic foot.[352] It has been estimated that the Faskin Ranch facility, accepting waste from only three states, two of which are relatively small waste-producers, will be forced to charge about four hundred and fifty dollars for every cubic foot of LLRW it accepts.[353] Critics of the Texas Compact argue that this fee is far too much to impose on Maine's generators. But these critics fail to recognize that, at present, Maine generators are without a disposal facility at any price. Three to four hundred dollars per cubic foot is the going rate for LLRW disposal under the LLRWPAA, and if Maine was not a member of the Texas Compact, it would probably still be paying that amount. The expense is unavoidable.

The other main problem with the Texas Compact, from Maine's point of view, is that it may not provide adequate disposal capacity for the volumes of waste that will be generated when Maine Yankee shuts down in 2008 (or sooner[354]). As noted above, when a nuclear power plant shuts down, much of the actual structure and equipment becomes "decommissioning waste" which must be disposed of in a LLRW disposal facility. Maine Yankee has planned to implement prompt dismantlement when it shuts down, a process that would create about 480,000 cubic feet of decommissioning waste before the end of the first decade of the twenty-first century.[355] Under the Texas Compact, the Compact Commission has allotted Maine 300,000 cubic feet of disposal space,[356] enough for the traditional commercial LLRW produced by Maine, but obviously insufficient to absorb the tremendous amount of LLRW that will be produced by the decommissioning of Maine Yankee.

Yet prompt dismantlement is not the only method of dealing with decommissioning waste open to Maine Yankee. Maine Yankee has considered entombment, which would involve sealing the entire

351. *See* Contreras, *supra* note 7, at 522. Since most of the costs of operating a disposal facility arise from factors that are relatively independent of the size of the facility or the amount of waste it accepts (such as the costs of site characterization and development, environmental studies, and monitoring), the fixed costs of operating a small facility are about the same as the fixed costs of operating a large facility. Therefore, in order to make the same return on the investment, a small facility will be forced to charge tipping fees well in excess of those charged by a large facility. *See id.*

352. *See* Gamboa, *supra* note 170.

353. *See* Legis. Rec. H-1222 (1993) (statement of Rep. Holt).

354. *See supra* notes 16 and 18.

355. *See* TOWARD A BETTER UNDERSTANDING, *supra* note 20, at 8. For an explanation of prompt dismantlement, see *supra* note 20.

356. *See* Legis. Rec. H-1222 (1993) (statement of Rep. Holt).

power plant from the environment by filling it with concrete.[357] This method would conserve Maine's allocated space at the Faskin Ranch site for commercial waste, and avoid the safety and health risks, as well as the costs, of dismantling the plant and shipping its radioactive parts across the country to Texas.[358] Another option open to Maine Yankee when the power plant is finally shut down permanently is to seal the plant from the environment for a safestore period of sixty years, giving Maine until 2068 to find a place to dispose of the decommissioning waste.[359] Another benefit of the safestore period is that it allows the decommissioning waste to decay during the sixty year period to much safer levels of radioactivity, making the dismantling and shipment of the plant's parts and equipment much less dangerous to the workers and to the public.[360] These alternatives to "prompt dismantlement" make arguments that the Texas Compact be rejected due to insufficient space largely moot.

c. From the Nation's Perspective

From the perspective of the nation, there are several negative aspects related to the Texas Compact. The first problem is not directly with the Compact itself, but again with the siting of the Texas facility. The designation of the Faskin Ranch site as the future location of a LLRW disposal facility is seen by many as "in flagrant disregard of the avowed goals of the 1983 La Paz Agreement."[361] Signed in 1983 at La Paz, Baja California, Mexico, the La Paz Agreement between the United States and Mexico provides for cooperation between the two nations in protecting and improving the environment surrounding their shared border.[362] According to the terms of the Agreement, the "border area" refers to the area one hundred kilometers on either side of the boundary between Mexico and the United States.[363] The Faskin Ranch site is approximately thirty-two kilometers from the Mexican border.[364]

Article Two of the La Paz Agreement provides that the two nations will "to the fullest extent practical, . . . adopt the appropriate measures to prevent, reduce and eliminate sources of pollution in

357. *See* TOWARD A BETTER UNDERSTANDING, *supra* note 20, at 8.
358. *See id.*
359. *See id.*
360. *See id.*
361. Griffin, *supra* note 317, at A11.
362. *See* Agreement to Cooperate in the Solution of Environmental Problems in the Border Area, Aug. 14, 1983, U.S.-Mex., 22 I.L.M. 1025 [hereinafter La Paz Agreement].
363. *See id.*, art. IV, at 1027.
364. *See Concerns Arise Over Mexican & U.S. Government Plans to Construct Disposal Sites for Hazardous Waste Near Border,* SOURCEMEX ECON. NEWS & ANALYSIS ON MEX., July 24, 1996, *available in* 1996 WL 7994071.

their respective territory which affect the border area of the other."[365] Article Seven provides that they will "assess, as appropriate, in accordance with their respective national laws, regulations and policies, projects that may have significant impacts on the environment of the border area, so that appropriate measures may be considered to avoid or mitigate adverse environmental effects."[366] Although it is unclear whether allowing Texas to construct a disposal facility in Hudspeth County would technically violate the La Paz agreement, Mexico has protested the siting decision.[367] Nonetheless, while the siting of the disposal facility may violate this agreement, it must be repeated that the Texas Compact *does not refer to the siting of the facility*, other than to say that it is a separate issue in the hands of the host state. Therefore, this is an issue between the federal government and the state of Texas. International tension between Mexico and the United States is simply another unfortunate result of a poor siting process by the state of Texas.

National commentators have also criticized the Texas Compact because it joins three states that do not share a common border, one of which is in the southwest and two of which are in New England. These critics have therefore charged that the Compact clearly violates the policy of the LLRWPAA that "the disposal of low-level radioactive waste can be most safely and effectively managed on a *regional* basis."[368] The term "regional" is conspicuously absent from the definitions offered in the LLRWPAA, so it is unclear whether Congress intended this adjective to be a substantive mandate allowing only compacts between neighboring states, or whether it was simply intended to mean "more than one state."[369] But opponents argue that the intent of Congress when it enacted the LLRWPAA was to encourage neighboring states in distinct areas of the country to form compacts, envisioning six or seven compacts, made up of states in close geographic proximity to each other.[370]

Even if this was the intent of Congress when it drafted the bill, however, one might argue that the failure to make this intent explicit forecloses the "regional" argument from being used to deny Congressional ratification to a group of states that have otherwise

365. La Paz Agreement, *supra* note 362, art. II, at 1026.

366. *Id.* art. VII, at 1027-28.

367. *See* 141 CONG. REC. H9110 (daily ed. Sept. 18, 1995) (unofficial translation of communication from the Mexican Government to U.S. State Department).

368. 42 U.S.C. § 2021d(a)(1) (1994) (emphasis added).

369. Probably the closest the LLRWPAA comes to defining "regional" is its definition of "compact region," which is defined as "the area consisting of all States that are members of a compact." *Id.* § 2021b(6). This seems to imply that the intent of the drafters was to encourage states in one "area" to form compacts. This is, however, not the only fair reading of the definition, which was certainly never intended to supply the answer to this question.

370. *See* BARLETT & STEELE, *supra* note 7, at 220.

complied with the LLRWPAA. Those who make this argument point out that Congress has already given its approval to one compact in which not all the member states shared a common border: The Northeast Compact, when it was ratified, consisted of New Jersey, Maryland, Delaware, and the nearby state of Connecticut. They further point out that perhaps the flexibility provided by the omission of a definition of "regional" should be recognized as a positive benefit that allows states without physical characteristics suitable for a safe, efficient LLRW disposal facility to compact with a state with more suitable characteristics. Proponents of the Texas Compact argue that Maine and other New England states are generally unsuitable for disposing of LLRW because of their high rainfall, high water table, and dense populations. Therefore, the federal legislation should provide the flexibility for such states to form compacts with more suitable western states such as Texas.

Of course, compliance with the Texas Compact, because of its "non-regional" nature, will involve shipping the LLRW of Maine and Vermont across a large portion of the country. Therefore, some would argue that whatever measure of safety is gained by allowing the facility to be located in a dry, sparsely-populated state is offset by citizens, mostly residents of non-party states, being put at risk by potential shipping mishaps. Balancing the relative risks of shipping LLRW across great distances against depositing LLRW in potentially unsafe disposal facilities obviously involves more speculation than certainty. We know that since the early sixties, the beginning of the era of commercial LLRW disposal, any LLRW produced in Maine must have been shipped across the country through "innocent" states. Soon after Maine Yankee began operations in 1972 (thus producing Maine's first significant amounts of LLRW), three out of the four closest commercial disposal facilities closed,[371] requiring Maine generators' LLRW to be shipped at least as far as South Carolina. One study estimated that one in every 250,000 interstate shipments of commodities involve some sort of radioactive material;[372] but, since 1971, the DOE has only documented 545 accidents in which any radioactive material was released.[373] We also know that the three sites that were forced to close in the seventies did so largely because of problems with water management in a humid climate.[374] Although Maine has outlawed SLB for any disposal facilities that might be located within the state, other methods of

371. As noted above, New York's West Valley site closed in 1975, Kentucky's Maxey Flats site closed in 1977, and Illinois's Sheffield site closed in 1978. *See supra* notes 51-58 and accompanying text. Thus, the facility closest to Maine since the seventies has been South Carolina's Barnwell site.

372. *See* GERSHEY ET AL., *supra* note 5, at 69.

373. *See* Petrella, *supra* note 60, at 135.

374. *See* discussion *supra* Part II.B.1.

disposal may be just as risky.[375] Therefore, the best solution may be to opt for risk in the short term, shipping Maine waste to Texas in order to ensure safety in the long term by using the best-suited facility for disposal. But in the end, as with nearly every issue of LLRW disposal, it is a matter of weighing the risks and choosing the option that everyone can live with.

D. Future Prospects for the Texas Compact

The Texas Low-Level Radioactive Waste Disposal Compact Consent Act was introduced before the United States Senate on June 21, 1994.[376] The same legislation was introduced before the House of Representatives on July 20, 1994.[377] Since the nine previous compacts had been ratified with little debate, one may have assumed that Congress would quickly approve the Compact. Although some problems concerning state siting issues might have existed, Texas, Maine, and Vermont felt they had complied with the requirements of the Federal Act, and therefore expected that their interstate compact would be ratified. On September 19, 1995, however, the Texas Compact Consent Act was defeated by a 243 to 176 vote in the House of Representatives.[378] The brief debate that was held on the proposed legislation the day before the vote provides some insight on the reasons for the bill's defeat.

A few representatives recognized that "[t]he responsibility of Congress in approving the compact is fairly simple. If the Texas compact complies with underlying requirements of the Low-level Radioactive Waste Act, Congress must grant approval to the compact."[379] And some also recognized that Congress should not "arbitrate over local issues such as site selection. That is a matter for the States, and it would be intrusive of us to assume the authority unto ourselves."[380] Nonetheless, it would seem that many who voted against the Texas Compact were swayed by arguments concerning the site of the facility, an issue that has nothing to do with the Texas Compact itself. Opponents argued that the site in Texas would violate the La Paz Agreement,[381] that the Faskin County site was un-

375. *See* Gamboa, *supra* note 170 (quoting Texas's Low Level Radioactive Waste Disposal Authority civil engineer Ruben Alvarado: "When you put something on top of the ground, you get in competition with Mother Nature—rainstorms, floods, tornados, [and] wear and tear.").

376. *See* S. 2222, 103d Cong. (1994).

377. *See* H.R. 4800, 103d Cong. (1994).

378. *See* 141 CONG. REC. H9153 (daily ed. Sept. 19, 1995).

379. 141 CONG. REC. 9107 (daily ed. Sept. 18, 1995) (statement of Rep. Schaefer).

380. *Id.* at H9113 (statement of Rep. Fields).

381. *See id.* at H9110 (statement of Rep. Coleman). Representative Coleman stated:

> [T]he citizens and Government of Mexico are concerned about the threat to their environment from this disposal site. While Congress claims it may

safe because of a propensity for earthquakes,[382] and that the people of Texas objected to the site but were unable to vote on the issue.[383] The last argument led to an interesting proposal by the Representative whose congressional district included the Faskin Ranch site:

> I believe that [the LLRWPAA] should be amended, actually to include the input from local constituents . . . .
>
> . . . .
>
> Although the States have control in determining site selection, today, we in Congress can give my constituents a voice by voting "no" on this measure and demanding that the process be amended to consider local rights.[384]

This suggestion perceptively recognized that the problems attributed to the Texas Compact may be a result of the underlying federal legislation.

The final argument that was given particular emphasis before the House of Representatives was that the Compact allowed the Compact Commission to agree to import out-of-state waste from non-member states; Texas Representatives apparently assumed that given this opportunity, the economic incentives offered by parties desperate to find a place to dispose of their LLRW would cause the Commission to allow Texas to become the "dumping ground" for the nation.[385] Like the decision concerning where and how to site the disposal facility, however, the drafting and interpretation of the Compact itself is properly an area left to the states and not subject to Congressional second-guessing.

Although the Compact was defeated in the House in 1995, its proponents have not given up hope that it will eventually be ratified. Lobbyists from Maine, Texas, and Vermont have been canvassing Washington, concentrating particularly on "House Staffers for U.S. Representatives who voted against the Compact on September 19[,

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> have no authority over the site selection process, we are responsible for guaranteeing that our binational agreements are respected by our own citizens, as well as by our State governments.

Id.

382. *See id.* at H9109 (statement of Rep. Coleman) ("I ask you, why would anyone deliberately dispose of such volatile materials in an area known for its seismic activity?"). *Id.*

383. *See id.*

> Do not think that all Texans are in agreement on this compact. Unlike the citizens of Maine, the people of Texas were never provided the opportunity to vote on whether or not they approve of a compact. The very people who have endangered their lives by accepting the wastes of other States, the people of Texas, had no say in the decision. If it was good enough for the people of Maine, it should have been good enough for the people of Texas.

Id.

384. *Id.* at H9108 (statement of Rep. Bonilla).

385. *Id.* at H9114 (statement of Rep. Doggett).

1995]."[386] Maine's Public Advocate, Stephen Ward, is among those lobbying the Washington legislators, and his office "continue[s] to believe that Congress will eventually approve the Compact."[387]

Additional debates in the House have emphasized some of the problems that have resulted in votes against the Compact, and illustrated that the Representatives were focusing on siting issues not properly before them.[388] One Representative stated that he would "offer an amendment to provide that if [the Compact] is approved, [the disposal facility] cannot be located in a seismically active area . . . ."[389] Such an amendment, however, would clearly infringe upon Texas's responsibility and authority under the LLRWPAA to provide for the disposal of its LLRW. The problems inherent in the siting of the facility, such as the allegation that the Faskin Ranch is located atop an active seismic fault, are properly left to Texas and the NRC—they have nothing to do with the Texas Compact.

Another interesting proposal made by the same Representative would infringe on state sovereignty in a different manner; he stated that he would offer an additional amendment to the Compact which would prohibit the importation of out-of-state waste into Texas from any other state but Maine or Vermont.[390] By doing so, he sought to guarantee that the Compact Commission could not be bought by a desperate state such as Connecticut, which had previously offered $100 million to the state of Texas in return for membership in the Compact.[391] Of course, such an amendment would be a clear violation of the LLRWPAA's grant of power to the states to "enter into such compacts as may be necessary" to safely and effectively dispose of LLRW.[392]

The discussions in the House of Representatives, however, are illustrative of the possibility that the Compact might not be ratified without substantive amendments. On the other hand, it is equally possible that the real problem lies not with the Compact, but with the *federal* legislation; indeed, when the Texas Compact arrives back before Congress it will be completely unchanged, leading to the conclusion that its proponents believe its problems have their roots elsewhere.

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386. ME. OFF. OF PUB. ADVOC., Q. REP., *supra* note 310, at 6.

387. *Id.*

388. *See* 141 CONG. REC. H15248 (daily ed. Dec. 20, 1995) (statement of Rep. Coleman). Representative Coleman stated:

> So what if it is out in west Texas, in a poor little old town called Sierra Blanca; right? It is not in . . . Houston, TX, or up near Dallas. No, it is just out in west Texas. So who cares, other than those 900 people that live in that county. Who cares?

Id.

389. *Id.* at H15250 (statement of Rep. Bryant).

390. *See id.* at H15249 (statement of Rep. Bryant).

391. *See* Ward, *supra* note 254.

392. 42 U.S.C. § 2021d(a)(2) (1994).

E. Possible Improvements in the Texas Compact

The only criticism of the Texas Compact that goes directly to the Compact itself is that it may result in risk to the nation's citizens because it involves shipments of LLRW between "non-regional" member states. As discussed above, however, it should be evident that allowing a compact between non-member states can also *avoid* the risks inherent in siting a disposal facility in the wet and cold climate of New England. The arguments that the Texas Compact will shackle Maine with high costs but not enough disposal capacity are misleading because Maine would be forced to pay high prices for LLRW disposal whether it was a member of the Texas Compact or not. Also, it should be recognized that the Texas Compact gives Maine more disposal capacity than it would have otherwise. If plans for the Texas Compact were abandoned, Maine would be forced to revert back to a search for a suitable in-state location for a disposal facility, a search that in the past "cost more than $4 million and engendered strong opposition from residents of communities that made the short list."[393]

As noted above, however, most of the major problems cited by critics of the Texas Compact are not problems with the Compact itself, but problems with the siting process employed by the State of Texas in choosing the Faskin Ranch site. These problems include the following: First, the process of siting the facility purposely sought to exclude the people of Texas from voicing their opinion on the matter, whether through voting in a referendum, as required in Maine, or by filing a civil action to challenge the methods by which the facility was sited. Second, the method by which the facility was sited was, itself, flawed. By defining the area in which the site was located before any scientific studies were performed to judge whether that area was, in fact, suitable, the Texas Legislature almost surely violated state and national rules for the siting of a LLRW facility. Third, by choosing an area in which seventy percent of the population is Hispanic, and by further circumscribing their already limited access to forums in which to speak out, the Texas Legislature may be guilty of "environmental racism." Finally, the siting of the facility at Faskin Ranch in Hudspeth County has been interpreted by the Mexican Government as a possible violation of the 1983 La Paz Agreement. The argument that the Hudspeth County site is unsuitable for LLRW disposal because of the danger of earthquakes may have some merit as well.

The arguments noted above concern the siting of the facility, however, and thus do not provide any basis for supporting or objecting to the Texas Compact itself. It should now be clear that the Texas Compact gives Texas the authority to "develop and have *full admin-*

393. Porter, *supra* note 314.

istrative control over the development, management and operation" of the LLRW disposal facility.[394] Also, the LLRWPAA gives each state the responsibility "for providing . . . for the disposal of . . . low-level radioactive waste generated within the State . . . ."[395] Thus, critics of the Texas Compact who charge that the Compact is flawed because of siting problems should point their fingers elsewhere. The issue of siting the facility should be left to be resolved by Texas and the NRC.

While it is true that the Texas Compact does not specify the location of the disposal facility and that choosing the location is solely the decision of the state of Texas, one may still wonder whether this explanation is adequate justification for Maine. While perhaps Congress cannot refuse to ratify the Compact based on Texas's siting process, can Maine join the Compact and send its LLRW to this disposal facility, which is located in a poor minority community, with a clear conscience? It has been argued in this Comment and elsewhere that Texas has already "made the ironclad decision that [the Faskin Ranch] site is going to be used, whether this compact passes or not,"[396] but perhaps that does not preclude Maine from negotiating with Texas to gain some input into the siting process. Might Maine insist that Texas begin its siting process anew, this time with the advice of its compact member states?

However attractive this possibility might be to Mainers who question their state's membership in the Texas Compact, it is almost certainly out of the question. Under the LLRWPAA, the siting of the facility in Texas is a decision solely for Texas to make. Thus, it would be improper for Maine to make such a suggestion. If the citizens of Maine object to the agreement that allows Maine generators to ship LLRW to the Faskin Ranch site, they must be prepared to deal with the LLRW themselves, for the only solution is to withdraw from the Texas Compact itself. As noted above, this decision would necessitate that the complex, controversial, and expensive procedure of siting a facility in Maine start again from scratch.

IV. CONCLUSION—SOLUTION?

The problems that should make Maine hesitate before sending its LLRW to Texas are not problems with the Texas Compact itself. Indeed, a careful analysis of the Texas Compact shows that it comports in every respect with the LLRWPAA. The problems that should trouble Maine (and Congress) are a direct result of the federal legislation under which the Compact was enacted. The federal legislation encourages fictional alliances, such as that between Connecticut and New Jersey, in which each state will host its own dispo-

394. Texas Compact, *supra* note 266, § 4.01 (emphasis added).
395. 42 U.S.C. § 2021c(a)(1)(A) (1994).
396. 141 CONG. REC. H15251 (Dec. 20, 1995) (statement of Rep. Fields).

sal facility, yet is allowed exclusionary authority because of its "compact membership." The federal legislation ignores the actual siting of disposal facilities, allowing states such as Texas to place facilities in areas such as Hudspeth County. The federal legislation may result in as many as fifteen disposal sites across the country, or, even worse, its result may be that no disposal sites will ever be agreed upon. It is the LLRWPAA that should be amended, or perhaps completely repealed.

As this Comment has shown, the states have faced substantial problems in implementing the mandates of the LLRWPA and its 1985 amendments. It should be noted that of the nine compacts in existence today, *none* has made any significant progress towards siting a facility in which to dispose of the LLRW they produce.[397] As a matter of fact, the facility in Texas may be the first new LLRW disposal facility to open in the United States since the Barnwell, South Carolina site opened in 1971.[398] Also, as noted above, while the nation probably only needs about two or three sites for safe, economical disposal of its LLRW, the LLRWPAA could potentially result in fifteen disposal sites being put into operation at once. This result, of course, means incredibly high costs of disposal and increased risk of an accident.

This Comment will not attempt to suggest changes in the LLRWPAA. It may be that the federal government should assume responsibility for the disposal of LLRW, setting up a few disposal facilities on federal land and monitoring the disposal itself. This proposal was met with fierce opposition when it was suggested in the late seventies, however, and the reaction may be the same today. Also, the federal government has been unsuccessful in finding a permanent repository for the nation's HLRW, so one might wonder why its prospects for success with LLRW should be any different. But it cannot be disputed that the states have failed to provide for the disposal of the LLRW they produce, and thus have created a national problem.

As for the Texas Compact, there is no *legal* reason why it should be rejected. It has its weaknesses, but it also has significant benefits. It is not perfect, but it may be as close to perfection as our state can come. The only reason to oppose the Texas Compact is borne out of a sense of moral responsibility, a choice that each Maine citizen must make individually. As for the nation, we must realize that with the benefits of nuclear power and other uses of radioactive material, comes radioactive waste. Congress must reexamine the nation's policy with respect to LLRW, and must acknowledge that the deadline by which each state was to have assumed responsibility for its LLRW has come and gone without a single new disposal facility

397. *See* Gamboa, *supra* note 170.
398. *See id.*

opening. It is time to put an end to the LLRW disposal problem that has plagued the nation for so many years.

Maxwell Branson