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# CONSTITUTIONAL DIMENSIONS OF STATE EFFORTS TO REGULATE NUCLEAR WASTE\*

EMILIO JAKSETIC\*\*

#### I. Introduction

The states have manifested an interest in regulating nuclear reactors since the beginning of the civilian atomic energy program.¹ An increasing number of states recently have become concerned with the health and safety problems associated with nuclear waste management.² This concern is manifested in the significant number of state laws aimed at regulating or affecting the handling, transportation, storage, and disposal of radioactive waste. Because of the extensive federal regulation of nuclear power, such statutes probably will be challenged under the doctrine of federal preemption. This Article will examine state ef-

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<sup>1.</sup> See Murphy & La Pierre, Nuclear "Moratorium" Legislation in the States and the Supremacy Clause: A Case of Express Preemption, 76 Colum. L. Rev. 392, 399 (1976); Parenteau, Regulation of Nuclear Plants: A Constitutional Dilemma for the States, 6 Envy'l L. 675, 683-84 (1976). See generally Note, Nuclear Power Regulation: Defining the Scope of State Authority, 18 Ariz. L. Rev. 987 (1976); Note, Application of the Preemption Doctrine to State Laws Affecting Nuclear Power Plants, 62 Va. L. Rev. 738 (1976); Annot., 82 A.L.R.3d 751 (1978).

<sup>2.</sup> Various forms of radioactive waste are generated throughout the nuclear fuel cycle, including uranium mill tailings, low-level radioactive waste, high-level radioactive waste, transuranic waste, and activation products. See generally Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Comm'n, A Classification System for Radioactive Waste Disposal—What Waste Goes Where: 4-6 (NUREG 0456, 1978); Nuclear Energy Policy Study Group, Nuclear Power Issues and Choices 243-49 (1977). If spent nuclear fuel is not processed to recover usable plutonium and uranium, then it will have to be handled as a waste. See id. at 246-50; Jaksetic, Legal Aspects of Radioactive High-Level Waste Management, 9 Envr'l L. 347, 352-54 (1979). Because of the toxicity of radioactive waste, it poses a serious threat to the environment and the public health and safety.

forts to regulate various aspects of nuclear waste management and will consider whether such state laws are preempted by federal law.

The Article is divided into four sections. Section I contains a review of the statutory basis for federal regulation of radioactive waste. Section II sets forth the general principles of federal preemption, and examines the limits of federal authority to preempt state law. Section III discusses the constitutional bases of federal authority to regulate radioactive waste. Section IV concludes the Article with a survey of state laws that seek to regulate or affect the handling, transportation, storage, and disposal of nuclear waste, including a discussion of whether particular state efforts to regulate nuclear waste are preempted by federal law. Throughout the Article, the author will develop arguments to support the proposition that despite extensive federal statutory authority to regulate radioactive waste, there is no constitutional basis for federal authority to wholly preempt the field and regulate all forms of radioactive waste in all circumstances. This proposition and the supporting arguments clearly are contrary to the prevailing view concerning federal authority to regulate nuclear waste. Nevertheless, the author believes that the prevailing view is flawed by inadequate legal analysis, which should be reexamined, reevaluated, and revised.3

<sup>3.</sup> The reader interested in a variety of perspectives on the subject can choose from a growing number of articles on federal regulation of radiation hazards and nuclear waste. See, e.g., Baram, Radiation from Nuclear Power Plants: The Need for Congressional Directives, 14 Harv. J. Legis. 905 (1977); Green & Zell, Federal-State Conflict in Nuclear Waste Management: The Legal Basis, 2 Energy L. Service (Monograph 6D) (Callaghan 1980); Lash, A Comment on Nuclear Waste Disposal, 4 J. Contemp. L. 267, 270-82 (1978); Linker, Beers & Lash, Radioactive Waste: Gaps in the Regulatory System, 56 Den. L.J. 1, 7-30 (1979); Lucas, Nuclear Waste Management: A Challenge to Federalism, 7 Ecology L.Q. 917, 929-36 (1979); Meeks, Nuclear Power and State Radiation Protection Measures: The Impotence of Preemption, 10 Envr'l L. 1 (1979); Moran, Regulating Nuclear Waste Disposal: Has Illinois a Role?, 68 LL. B.J. 378 (1980); Poulin, Who Controls Low-Level Radioactive Wastes? 6 EnvT'L Aff. 201 (1977); Trosten & Ancarrow, Federal-State-Local Relationships in Transporting Radioactive Materials: Rules of the Nuclear Road, 68 Ky. L.J. 251 (1979-80); Comment, Disposal of High-Level Nuclear Waste: An Abdication of Responsibility?, 1979 U. LL. L.F. 915, 918-28. See also INTERAGENCY REVIEW GROUP ON NUCLEAR WASTE MANAGEMENT, REPORT TO THE PRESI-DENT (1979); OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS, U.S. NUCLEAR REGU-LATORY COMM'N, REGULATION OF FEDERAL RADIOACTIVE WASTE ACTIVITIES (NUREG 0527. September 1979).

# II. STATUTORY BASIS FOR FEDERAL REGULATION OF NUCLEAR WASTE

A survey of federal statutes affecting radioactive waste disposal reveals a complex network of legal authority vested in various federal agencies. To date, Congress has not dealt with nuclear waste disposal in any comprehensive or systematic fashion. To appreciate the present system of federal regulation, one must examine several federal statutes. Such an examination will provide a background against which to consider the issue of federal preemption of state efforts to regulate nuclear waste.

### A. Atomic Energy Act of 1954<sup>5</sup>

According to the Atomic Energy Act of 1954, the Nuclear Regulatory Commission (NRC)<sup>6</sup> has authority to regulate byproduct material<sup>7</sup> and special nuclear material.<sup>8</sup> The Act defines "byproduct material" as

(1) any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material, and (2) the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.9

#### Special nuclear material is defined as

(1) plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the Commission, pursuant to the provisions of section 2071 of this title, determines to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any

<sup>4.</sup> On July 30, 1980 the Senate passed the Nuclear Waste Policy Act, (S.2189, 96th Cong., 2d Sess.), 126 Cong. Rec. 10239 (1980). If the bill had been passed by the House and signed into law, the Act would have become the first comprehensive federal statute on nuclear waste management.

<sup>5. 42</sup> U.S.C. §§ 2011-2282 (1976 & Supp. II 1978 & Supp. III 1979).

<sup>6.</sup> The old Atomic Energy Commission was abolished and its functions were transferred to the Nuclear Regulatory Commission by the Energy Reorganization Act of 1974. 42 U.S.C. §§ 5814, 5841 (1976 & Supp. II 1978 & Supp. III 1979).

<sup>7.</sup> Id. §§ 2111-2114 (1976 & Supp. II 1978 & Supp. III 1979).

<sup>8.</sup> Id. §§ 2071-2078 (1976 & Supp. II 1978 & Supp. III 1979).

<sup>9.</sup> Id. § 2014(e) (Supp. II 1978 & Supp. III 1979).

of the foregoing, but does not include source material.10

Most radioactive waste falls within the definition of byproduct material, and therefore, is subject to NRC regulation.<sup>11</sup> When nuclear fuel is considered a waste, as it is in a no-recycle nuclear fuel cycle, it falls within the definition of special nuclear material because it contains plutonium and enriched uranium.<sup>12</sup>

The Atomic Energy Act directs the NRC to

require by rule, regulation, or order that prior to the termination of any license which is issued after the effective date of this section, title to the land, including any interests therein (other than land owned by the United States or by a State) which is used for the disposal of any byproduct material, as defined by section 2014(e)(2) of this title, pursuant to such license shall be transferred to—

- (A) the United States, or
- (B) the State in which such land is located, at the option of such State.
- (2) Unless the Commission determines prior to such termination that transfer of title to such land and such byproduct material is not necessary or desirable to protect the public health, safety, or welfare or to minimize or eliminate danger to life or property.<sup>18</sup>

Presumably, transfer of the title of the land to a state would be made pursuant to a turnover agreement under section 274 of the Act.<sup>14</sup>

The NRC also has authority to license the use of special nuclear material for medical therapy and research and for industrial and commercial purposes. Together, these various statutory provisions imply that Congress intended the NRC to have the primary authority to regulate the disposal of radioactive

<sup>10.</sup> Id. § 2014(aa) (1976).

<sup>11.</sup> See Harris County, Tex. v. United States, 292 F.2d 370 (5th Cir. 1961) (Atomic Energy Commission's authority to regulate byproduct materials includes authority to license the handling of radioactive waste). Accord, City of New Britain, Conn. v. AEC, 308 F.2d 648 (D.C. Cir. 1962).

<sup>12.</sup> See 42 U.S.C. § 2014(aa). Special nuclear material is excepted from the definition of byproduct material. Id. § 2014(e).

<sup>13. 42</sup> U.S.C. § 2113(b) (Supp. II 1978 & Supp. III 1979).

<sup>14.</sup> Id. § 2021 (1976 & Supp. II 1978). Generally, § 2021 provides for federal cooperation with the states in certain aspects of nuclear materials regulation.

<sup>15.</sup> Id. § 2134 (1976).

waste resulting from the use of special nuclear material for medical, industrial, and commercial purposes.

Under section 108 of the Act,<sup>16</sup> the NRC is authorized to recapture any special nuclear material whenever Congress declares the existence of a state of war or national emergency. Since spent nuclear fuel contains special nuclear material, any spent fuel treated as waste would be subject to recapture or seizure by the federal government under the terms of section 108.

The NRC has statutory authority to regulate the possession and use of special nuclear material and byproduct material in such manner "as the Commission may deem necessary or desirable to promote the common defense and security or to protect health or to minimize danger to life or property . . . . "17 Furthermore, the NRC may promulgate regulations or orders it deems necessary "to govern any activity authorized pursuant to this Act including standards and restrictions governing the design, location, and operation of facilities used in the conduct of such activity, in order to protect health and to minimize danger to life or property . . . . "18 Pursuant to this statutory authority, the NRC has promulgated various regulations concerning the handling and disposal of nuclear waste. 19 Among the regulations promulgated by the NRC are those concerning the disposal of nuclear waste by licensees<sup>20</sup> and those governing byproduct material.21 NRC regulations concerning byproduct material also apply to those facilities and activities of the Energy Research and Development Administration<sup>22</sup> that are subject to NRC licensing under the terms of the Energy Reorganization Act of 1974.28 The

<sup>16.</sup> Id. § 2138.

<sup>17.</sup> Id. § 2201(b).

<sup>18.</sup> Id. § 2201(i)(3).

<sup>19.</sup> Radioactive material or other sources of radiation not licensed by the NRC are exempted from the NRC regulations setting standards for protection against radiation hazards. 10 C.F.R. § 20.1(b) (1980).

<sup>20.</sup> Id. §§ 20.301-305.

<sup>21.</sup> Id. parts 31-35.

<sup>22.</sup> Id. § 30.4(k).

<sup>23. 42</sup> U.S.C. § 5842 (1976 & Supp. II 1978). Under the Energy Reorganization Act of 1974, the NRC has licensing authority over facilities of the Energy Research and Development Administration used for the receipt and storage of high-level radioactive waste. See id. The Energy Research and Development Administration was abolished by the Department of Energy Organization Act, and its functions were transferred to the newly created Department of Energy. Id. § 7151(a) (Supp. II 1978 & Supp. III 1979).

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NRC has issued regulations governing the licensing of special nuclear material<sup>24</sup> and domestic facilities producing or utilizing special nuclear material.<sup>25</sup> Spent nuclear fuel, whether or not considered as a waste, arguably falls within the scope of these regulations because it contains special nuclear material. The NRC also has established a basic policy on nuclear waste management facilities,<sup>26</sup> and has promulgated regulations for the packaging and transportation of radioactive materials.<sup>27</sup>

A crucial provision of the Act concerning state regulation of radiation hazards is section 274.28 Section 274 authorizes the NRC to enter into agreements with the governor of any state to transfer to the state regulatory authority over byproduct, source, and special nuclear materials, including the regulation of such materials "for the protection of the public health and safety from radiation hazards." Any program established by an agreement state must be compatible with federal standards, but the health, safety, and environmental standards for byproduct materials set by an agreement state may be more stringent than federal standards. Pursuant to authority granted to it under section 161 of the Act, the NRC has promulgated regulations concerning turnover agreements entered into by states and the Commission under section 274(b). The legislative history of

<sup>24. 10</sup> C.F.R. part 70 (1980).

<sup>25.</sup> Id. part 50.

<sup>26.</sup> Id. part 50, app. F.

<sup>27.</sup> Id. part 71. In 1979, the Department of Transportation and the NRC signed a memorandum of understanding concerning their respective responsibilities for regulating the transportation of radioactive materials. See 44 Fed. Reg. 38,690 (1979).

<sup>28. 42</sup> U.S.C. § 2021 (1976 & Supp. II 1978 & Supp. III 1979).

<sup>29.</sup> Id. § 2021(b). It is important to note that the NRC is mandated to retain authority with respect to the regulation of (1) the ocean disposal of nuclear waste materials; and (2) "the disposal of such other byproduct, source, or special nuclear material as the Commission determines by regulation or order should, because of the hazards or potential hazards thereof, not be disposed of without a license from the Commission." Id. § 2021(c). As of January 1, 1980, the NRC had entered into turnover agreements with twenty-six states: Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Kansas, Kentucky, Louisiana, Maryland, Mississippi, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Oregon, Rhode Island, South Carolina, Tennessee, Texas, and Washington. See [1979] U.S. Nuclear Regulatory Comm'n Ann. Rep. 173.

<sup>30.</sup> See 42 U.S.C. § 2021(d)(2) (1976 & Supp. II 1978 & Supp. III 1979).

<sup>31.</sup> Id. § 2021(o)(2).

<sup>32.</sup> Id. § 2201.

<sup>33. 10</sup> C.F.R. part 150 (1980).

section 274 strongly supports the view that Congress intended to preempt state regulation of radiation hazards except when such regulation was authorized by a turnover agreement between a state and the NRC.<sup>34</sup>

34. Certain excerpts from the report by the Joint Committee on Atomic Energy concerning the 1959 amendments to the Atomic Energy Act are worth reproducing verbatim:

As explained in more detail subsequently in this report, the Commission [AEC] now regulates and licenses the materials covered by the Atomic Energy Act (byproduct, source, and special nuclear materials) to protect against radiation hazards. . . . [I]n order for a State to so regulate or license such materials, it must first establish an adequate program for this purpose and enter into an agreement with the Commission.

S. Rep. No. 870, 86th Cong., 1st Sess., reprinted in [1959] U.S. Code Cong. & Ad. News 2872-73.

The AEC-proposed bill, forwarded to the Joint Committee [on Atomic Energy] in late June 1957, would have authorized concurrent radiation safety standards to be enforced by the States "not in conflict" with those of the AEC. It provided that the States might adopt, inspect against, and enforce radiation standards for the protection of health and safety in areas regulated by the AEC. Thus, the bill proposed by the AEC in 1957 would have permitted dual regulation by both Federal and State Governments of byproduct, source, and special nuclear materials for protection against radiation hazards.

Id. at 5, [1959] U.S. Code Cong. & Ad. News at 2875 (emphasis added).

It is not intended to leave *any* room for the exercise of dual or concurrent jurisdiction by States to control radiation hazards by regulating byproduct, source, or special nuclear materials. The intent is to have the material regulated and licensed either by the Commission [AEC], or by the State and local governments, but not by both. The bill is intended to encourage States to increase their knowledge and capacities, and to enter into agreements to assume regulatory responsibilities over such materials.

Id. at 9, [1959] U.S. Code Cong. & Ad. News at 2879 (emphasis added).

During the duration of [a section 274 turnover] agreement, it is recognized that the State shall have the authority to regulate [byproduct, source, and special nuclear] materials for the protection of the public health and safety from radiation hazards. Prior to such an agreement, the Commission [AEC] has the responsibility for the regulation of such materials.

Id. at 10, [1959] U.S. Code Cong. & Ad. News at 2880 (emphasis added).

Subsection k provides that nothing in the new section 274 shall be construed to affect the authority of any State or local agency to regulate activities for purposes other than protection against radiation hazards. This subsection is intended to make it clear that the bill does not impair the State authority to regulate activities of AEC licensees for the manifold health, safety, and economic purposes other than radiation protection. As indicated elsewhere, the Commission [AEC] has exclusive authority to regulate for protection against radiation hazards until such time as the State enters into an agreement with the Commission to assume such responsibility.

Id. at 12, [1959] U.S. Code Cong. & Ad News at 2882-83 (emphasis added).

The general consensus of courts and commentators is that section 274 of the Atomic Energy Act preempts the states from regulating radiation hazards. See Northern States Power Co. v. Minnesota, 447 F.2d 1143 (8th Cir. 1971), aff'd mem., 405 U.S. 1035 (1972);

#### B. Energy Reorganization Act of 1974<sup>35</sup>

In addition to its authority under the Atomic Energy Act to regulate source, byproduct, and special nuclear materials, the NRC has authority under section 202 of the Energy Reorganization Act to license and regulate certain facilities of the Energy Research and Development Administration including the following:

Facilities used primarily for the receipt and storage of highlevel radioactive wastes resulting from activities licensed under [the Atomic Energy] Act.

... Retrievable Surface Storage Facilities and other facilities authorized for the express purpose of subsequent long-term storage of high-level radioactive waste generated by the Administration, which are not used for, or are part of, research and development activities.<sup>36</sup>

The Act also establishes an Office of Nuclear Material Safety and Safeguards within the NRC and authorizes its director to cooperate with the Energy Research and Development Administration in developing contingency plans concerning "threats, thefts and sabotage relating to special nuclear materials, high-level radioactive wastes and nuclear facilities resulting from all activities licensed under the Atomic Energy Act of 1954, as amended." Finally, the Act directs the NRC to conduct a national survey to locate and identify potential sites suitable for retrievable nuclear waste storage facilities. 38

Pacific Legal Foundation v. State Energy Resources Conservation & Dev. Comm'n, 472 F. Supp. 191, 197-200 (S.D. Cal. 1979); United States v. City of New York, 463 F. Supp. 604, 608-12 (S.D.N.Y. 1978); Marshall v. Consumers Power Co., 65 Mich. App. 237, 247-53, 237 N.W.2d 266, 275-77 (1975); State Dep't of Environmental Protection v. Jersey Cent. Power & Light Co., 69 N.J. 102, 351 A.2d 337, 342-43 (1976); Estep & Adelman, State Control of Radiation Hazards: An Intergovernmental Relations Problem, 60 Mich. L. Rev. 41, 58-63 (1961); Lucas, supra note 3, at 940-49; Murphy & La Pierre, supra note 1, at 398-405; Note, Application of the Preemption Doctrine to State Laws Affecting Nuclear Power Plants, 62 Va. L. Rev. 738, 774-79 (1976); Comment, Disposal of High-level Nuclear Waste: An Abdication of Responsibility?, 1979 U. Ill. L.F. 915, 930-33; Annot., 82 A.L.R.3d 751 (1978). But see Meeks, supra note 3 (arguing that the holding of Northern States Power is obsolete in light of subsequent refinements in the preemption doctrine).

<sup>35. 42</sup> U.S.C. §§ 5801-5891 (1976 & Supp. II 1978 & Supp. III 1979).

<sup>36.</sup> Id. § 5842.

<sup>37.</sup> Id. § 5844(b)(2)(B) (1976).

<sup>38.</sup> Id. § 5847.

#### C. Department of Energy Organization Acts 2

Section 203(a)(8) of the Act sets forth the responsibilities of the Department of Energy relating to radioactive waste management. It provides in pertinent part as follows:

The functions which the Secretary of the Department of Energy shall assign to the Assistant Secretaries include . . . the following:

- (8) Nuclear waste management responsibilities, including—
- (A) the establishment of control over existing Government facilities for the treatment and storage of nuclear wastes...:
- (B) the establishment of control over all existing nuclear waste in the possession of the Government and all commercial nuclear waste presently stored on other than the site of a licensed nuclear power electric generating facility . . .;
- (C) the establishment of temporary and permanent facilities for storage, management, and ultimate disposal of nuclear wastes:
- (D) the establishment of facilities for the treatment of nuclear wastes;
- (E) the establishment of programs for the treatment, management, storage, and disposal of nuclear wastes . . . . 40

The Senate Report on the bill indicated a congressional intent to provide "a comprehensive statement of responsibilities relating to nuclear waste management that the committee wants centralized and coordinated at high levels in the Department [of Energy]."<sup>41</sup>

Thus, the Department of Energy Organization Act gave the Department of Energy express authority over nuclear waste management. In addition, the Act transferred to the Department the functions previously performed by the Energy Research and

<sup>39. 42</sup> U.S.C. §§ 7101-7352 (Supp. II 1978 & Supp. III 1979).

<sup>40.</sup> Id. § 7133(a)(8).

<sup>41.</sup> S. Rep. No. 95-164, 95th Cong., 1st Sess. 23 (1977), reprinted in [1977] U.S. Code Cong. & Ad. News 854, 877. The House bill had no parallel provision. It is worth noting that, although the Department of Energy has statutory authority over nuclear waste disposal in general, the NRC's licensing authority over nuclear waste repositories appears limited to high-level radioactive waste repositories. Compare 42 U.S.C. § 5842 (Supp. II 1978 & Supp. III 1979) with id. § 7133(a)(8).

Development Administration.<sup>42</sup> Presumably this transfer of authority includes those responsibilities concerning nuclear waste assigned to the Energy Research and Development Administration by the Energy Reorganization Act of 1974.

#### D. Uranium Mill Tailings Radiation Control Act of 197848

Under this Act, the Secretary of Energy is authorized to enter into cooperative agreements with states to provide remedial treatment of various designated sites containing residual uranium mill tailings and other radioactive waste associated with the processing of uranium ore. The Act directs the Administrator of the Environmental Protection Agency (EPA) to promulgate standards

for the protection of the public health, safety, and the environment from radiological and nonradiological hazards associated with residual radioactive materials (as defined in section 191 of the Uranium Mill Tailings Radiation Control Act of 1978) located at inactive uranium mill tailings sites and depository sites for such materials selected by the Secretary of Energy, pursuant to Title I of the Uranium Mill Tailings Radiation Control Act of 1978.<sup>45</sup>

States may license and regulate uranium mill tailings pursuant to a turnover agreement with the federal government, provided that the state licensing standards are equivalent to, or more stringent than, those of the NRC.<sup>46</sup> Upon termination of the license authorizing the possession, distribution, and transfer of uranium ore and uranium mill tailings, all uranium mill tailings sites must be transferred to the federal government or the state

<sup>42. 42</sup> U.S.C. § 7151 (Supp. II 1978 & Supp. III 1979). This statute provides: Except as otherwise provided in this chapter, there are hereby transferred to, and vested in, the Secretary [of Energy] all of the functions vested by law in the Administrator of the Energy Research and Development Administration or the Energy Research and Development Administration; and the functions vested by law in the officers and components of . . . such Administration.

Id.
43. 42 U.S.C. §§ 2014, 2021, 2022, 2111, 2113, 2114, 2201, 7901-7942 (Supp. II 1978 & Supp. III 1979).

<sup>44.</sup> Id. §§ 7913-7923.

<sup>45.</sup> Id. § 2022.

<sup>46.</sup> Id. § 2021(o).

in which the sites are located.47

It is clear that a prime motivation for this statute was congressional concern over the potential threat to public health and safety posed by uranium mill tailings. Despite a perfunctory declaration that uranium mill tailings should be regulated to protect interstate commerce, <sup>48</sup> Congress was concerned primarily with the public health and safety aspects of the problem. <sup>49</sup>

## E. Transportation Safety Act of 197450

Under this Act, the Secretary of Transportation has the authority to designate radioactive substances as hazardous materials posing an unreasonable risk to health and safety or to property when transported in interstate commerce.<sup>51</sup> The Secretary is authorized to promulgate regulations for the handling of hazardous materials, including radioactive materials, transported in interstate or foreign commerce.<sup>52</sup> Pursuant to this statutory authority, the Federal Highway Administration has promulgated general regulations concerning the transportation of hazardous materials.<sup>53</sup> The Materials Transportation Bureau of the Department of Transportation has promulgated detailed regulations on the transportation of hazardous materials, including radioactive materials.<sup>54</sup> Section 112 of the Act clearly indicates a

<sup>47.</sup> Id. § 2113. For further discussion of this Act, see Green & Zell, supra note 3, at 10-11; Linker, Beers & Lash, supra note 3, at 12-18.

<sup>48. 42</sup> U.S.C. § 7901 (Supp. II 1978 & Supp. III 1979).

<sup>49.</sup> See, e.g., H.R. Rep. No. 95-1480—part 1, 95th Cong., 2d Sess. 11-12, 17-18 and H.R. Rep. No. 95-1480—part 2, 95th Cong., 2d Sess. 23, 25-28, 29, reprinted in [1978] U.S. Code Cong. & Ad. News 7433, 7434-35, 7440, 7450, 7451-55, 7456.

<sup>50. 45</sup> U.S.C. §§ 39, 437, 438, 440, 441 (1976 & Supp. II 1978 & Supp. III 1979); 46 U.S.C. § 170 (1976); 49 U.S.C. §§ 1471, 1472, 1653, 1655, 1801-1812, 1901-1907 (1976 & Supp. II 1978 & Supp. III 1979). Title I of the Transportation Safety Act is known as the Hazardous Materials Transportation Act. 49 U.S.C. §§ 1801-1812 (1976 & Supp. III 1978 & Supp. III 1979).

<sup>51. 49</sup> U.S.C. § 1803 (1976). The statutory definition of commerce includes activities affecting interstate and foreign commerce. See id. § 1802(1).

<sup>52.</sup> Id. § 1802-1807. When the Department of Transportation was created, the Secretary of Transportation was vested with the authority, formerly vested in the Interstate Commerce Commission under 18 U.S.C. §§ 831-835 (1976), to regulate the transportation of dangerous materials, including radioactive materials. 49 U.S.C. § 1655(a)(4) (1976). Because of statutory exemptions, this transfer gave the Secretary of Transportation only limited authority over the transportation of radioactive materials. See 18 U.S.C. § 832(c) (1976). See generally Trosten & Ancarrow, supra note 3, at 263-64.

<sup>53. 49</sup> C.F.R. part 397 (1979).

<sup>54.</sup> Id. parts 171-79. For the regulations concerning the transportation of radioactive

congressional intent to preempt, at least in part, state and local regulation in the area.<sup>55</sup>

#### F. Other Federal Laws

A number of other federal laws affect radiation hazards and radioactive waste disposal. Under the Government Reorganization Plan Number 3 of 1970, the EPA was given the authority to establish "generally applicable environmental standards for the protection of the general environment from radioactive material." Although the NRC retains authority to regulate radiation emission levels at nuclear facilities within the scope of its statutory authority, the EPA now has the responsibility to protect the environment and the general public from off-site exposure to radiation. The state of the

The Clean Air Act Amendments of 1977 permit the states to adopt emission standards equal to or more stringent than federal standards. Since the Act was amended to include radioactive air pollutants (including source, byproduct, and special nuclear materials), it seems clear that the states now possess authority to regulate radioactive air pollution. The legislative history of the 1977 amendments demonstrate that Congress intended the holding of Northern States Power Co. v. Minnesota not to apply in the context of radioactive air pollution.

materials, see id. §§ 173.389-.398. In 1979, the Department of Transportation and the NRC signed a memorandum of understanding concerning their respective responsibilities for regulating the transportation of radioactive materials. See 44 Fed. Reg. 38,690 (1979).

<sup>55. 49</sup> U.S.C. § 1811 (1976 & Supp. III 1979). The Act permits the Secretary of Transportation to determine that inconsistent state or local law should not be preempted whenever the Secretary finds that the state or local law "(1) affords an equal or greater level of protection to the public than is afforded by the requirements of this title or of regulations issued under this title and (2) does not unreasonably burden commerce." Id. § 1811(b) (1976).

<sup>56. 5</sup> U.S.C. app. II (Supp. 1980). Pursuant to this authority, the Environmental Protection Agency has promulgated environmental radiation protection standards for nuclear power operations, 40 C.F.R. §§ 190.01-.12 (1979).

<sup>57.</sup> See Baram, supra note 3, at 909-10. See also Jaksetic, supra note 2, at 368.

<sup>58. 42</sup> U.S.C. § 7416 (Supp. II 1978 & Supp. III 1979).

<sup>59.</sup> Id. § 7602(g).

<sup>60. 447</sup> F.2d 1143 (8th Cir. 1971), aff'd mem., 405 U.S. 1035 (1972). For a discussion of this case, see text accompanying notes 166-73 infra.

<sup>61.</sup> H.R. REP. No. 95-294, 95th Cong., 1st Sess. 43 n.8, reprinted in [1977] U.S. CONG. & AD. NEWS 1077, 1121 n.8. See also Meeks, supra note 3, at 24-30.

The Federal Safe Drinking Water Act limits the discharge of contaminants, including radiological substances, which may adversely affect public water systems and endanger the public health.<sup>62</sup> The Federal Water Pollution Control Act Amendments of 1972 and the Marine Protection, Research, and Sanctuaries Act of 1972 prohibit the discharge or dumping of pollutants, including radioactive waste, into navigable waters<sup>63</sup> or into the ocean.<sup>64</sup> The Supreme Court has held, however, that the radioactive pollutants that may be regulated by the EPA and the states under the Federal Water Pollution Control Act do not include source, byproduct, or special nuclear materials discharged by NRC licensees.<sup>65</sup>

#### III. FEDERAL PREEMPTION

#### A. General Principles

Under the supremacy clause, the laws of the United States enacted pursuant to constitutional authority are the supreme law of the land, 66 and any state laws to the contrary are preempted to the extent that they conflict with federal law. 67 Whenever a state law conflicts with a valid federal law, it must yield regardless of its relative importance to the state. 68 Because there is no single constitutional test or formula for determining whether a particular state law is preempted by federal laws governing the same subject matter, 69 the Supreme Court has developed a series of preemption tests.

Preemption need not be explicit; it may be implied when federal regulation of the subject matter is so detailed and pervasive that it is reasonable to infer that Congress intended to preclude the states from regulating the subject matter.<sup>70</sup> Further-

<sup>62. 42</sup> U.S.C. §§ 300f(6), 300g-300j-9 (1976 & Supp. II 1978 & Supp. III 1979).

<sup>63. 33</sup> U.S.C. § 1311(f) (1976).

<sup>64. 33</sup> U.S.C. §§ 1402(c), (j), 1411, 1412(a) (1976 & Supp. III 1979).

<sup>65.</sup> See Train v. Colorado Pub. Interest Research Group, 426 U.S. 1 (1976).

<sup>66.</sup> U.S. Const. art. VI cl. 2.

<sup>67.</sup> McCulloch v. Maryland, 17 U.S. (4 Wheat.) 316, 406 (1819).

<sup>68.</sup> Free v. Bland, 369 U.S. 663, 669 (1962). See DeCanas v. Bica, 424 U.S. 351, 357 (1976) ("[E]ven state regulation designed to protect vital state interests must give way to paramount federal legislation.").

<sup>69.</sup> See Hines v. Davidowitz, 312 U.S. 52, 67 (1941).

<sup>70.</sup> Rice v. Santa Fe Elevator Corp., 331 U.S. 218, 230 (1947). See City of Burbank v. Lockheed Air Terminal, Inc., 411 U.S. 624, 633-34 (1973); Bethlehem Steel Co. v. New

more, preemption may be implied by the nature of the power exerted by Congress, the result sought to be achieved by the federal regulation, and the character of the obligations imposed by federal law.71 In the absence of a clear or express congressional intent to preempt state law, however, courts will not presume that a federal statute was intended to supersede the exercise of state power.72 Federal preemption of state laws enacted pursuant to the police power will "not be implied unless the act of Congress, fairly interpreted, is in actual conflict with the law of the state."73 Although conflicts between state and federal laws will not be sought out "where none clearly exists,"74 to the extent that a state statute actually conflicts with a valid federal statute, it will be struck down under the supremacy clause.78 Such a conflict will be found when the state law "stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress,"76 or "where compliance with

York State Labor Relations Bd., 330 U.S. 767, 773 (1947).

<sup>71.</sup> Hines v. Davidowitz, 312 U.S. 52, 70 (1941). See Bethlehem Steel Co. v. New York State Labor Relations Bd., 330 U.S. 767, 772 (1947) ("[E]xclusion of state action may be implied from the nature of the legislation and the subject matter . . . . "); Sturges v. Crowninshield, 17 U.S. (4 Wheat.) 122, 193 (1819) ("Whenever the . . . nature of the power [granted to Congress] require[s] that it should be exercised exclusively by Congress, the subject is as completely taken from the state legislatures as if they had been expressly forbidden to act on it.").

<sup>72.</sup> Schwartz v. Texas, 344 U.S. 199, 202-03 (1952), overruled on other grounds, Lee v. Florida, 392 U.S. 378 (1968). Accord, New York State Dep't of Social Servs. v. Dublino, 413 U.S. 405, 413 (1973). See Cloverleaf Butter Co. v. Patterson, 315 U.S. 148, 156 (1942) (When there is no express prohibition of state action, state law will not be preempted unless it is "clear that the federal provisions are inconsistent with those of the state.").

<sup>73.</sup> Savage v. Jones, 225 U.S. 501, 533 (1912). Accord, Ray v. Atlantic Richfield Co., 435 U.S. 151, 157 (1978); Florida v. United States, 282 U.S. 194, 211-12 (1931); Carey v. South Dakota, 250 U.S. 118, 122 (1919). See Perez v. Campbell, 402 U.S. 637, 644 (1971) ("Deciding whether a state statute is in conflict with a federal statute and hence invalid under the Supremacy Clause is essentially a two-step process of first ascertaining the construction of the two statutes and then determining the constitutional question whether they are in conflict.").

<sup>74.</sup> Joseph E. Seagram & Sons v. Hostetter, 384 U.S. 35, 45 (1966) (citing Huron Portland Cement Co. v. City of Detroit, 362 U.S. 440, 446 (1960)).

<sup>75.</sup> Ray v. Atlantic Richfield Co., 435 U.S. 151, 158 (1978). See New York Tel. Co. v. New York State Dep't of Labor, 440 U.S. 519, 540 (1979) ("Preemption of state law is sometimes required by the terms of a federal statute."). State law will be preempted only to the extent necessary to achieve the aims of the federal legislation in question. Merrill Lynch, Pierce, Fenner & Smith v. Ware, 414 U.S. 117, 127 (1973).

<sup>76.</sup> Hines v. Davidowitz, 312 U.S. 52, 67-68 (1941). See Anderson v. Abbott, 321 U.S. 349, 365 (1944) ("The policy underlying a federal statute may not be defeated by

both federal and state regulations is a physical impossibility."<sup>77</sup> The acknowledged police powers of the states cannot be exercised in a manner that will defeat or frustrate a federal statute enacted pursuant to constitutional authority.<sup>78</sup>

#### B. Doctrine of Enumerated Powers

One aspect of preemption analysis often is overlooked or given only passing consideration. Before a court can decide whether a state law is preempted by federal law, it must determine whether the federal law is valid. This requirement flows from the language of the supremacy clause, which provides as follows: "This Constitution, and the laws of the United States which shall be made in Pursuance thereof... shall be the supreme Law of the Land...." The supremacy of a federal statute should not be presumed, but rather it is conditioned on the requirement that it is enacted pursuant to some constitutional authority. It is axiomatic that any federal law enacted in the face of an express constitutional prohibition cannot preempt state law. Even when a federal statute is not prohibited by an express provision of the Constitution, if enacted without constitutional authority, it is ineffective to preempt state law. Since

<sup>. . .</sup> an assertion of state power.").

<sup>77.</sup> Florida Lime & Avocado Growers, Inc. v. Paul, 373 U.S. 132, 142-43 (1963).

<sup>78.</sup> Reid v. Colorado, 187 U.S. 137, 151 (1902). Accord, Case v. Bowles, 327 U.S. 92, 102-03 (1946). The federal courts will not permit a state to frustrate the operation of federal law by enacting conflicting legislation designed to serve a perfunctory state purpose. Perez v. Campbell, 402 U.S. 637, 651-52 (1971). Accord, Pacific Legal Foundation v. State Energy Resources Conservation & Dev. Comm'n, 472 F. Supp. 191, 198 (S.D. Cal. 1979). See Hughes v. Oklahoma, 441 U.S. 322, 336 (1979) (When considering the purpose of a challenged state law, the federal courts are not required to accept the name, description, or characterization given the law by the state legislature or state courts, but rather will consider the practical impact or effect of the state law.).

<sup>79.</sup> U.S. Const. art. VI, cl. 2 (emphasis added).

<sup>80.</sup> Carter v. Carter Coal Co., 298 U.S. 238, 296 (1936). See Northern States Power Co. v. Minnesota, 447 F.2d 1143, 1146 (8th Cir. 1971), aff'd mem., 405 U.S. 1035 (1972) ("[I]n the approach to any inquiry into federal preemption, it must be initially determined that Congressional action establishing federal regulation in a particular field has been undertaken pursuant to one of the powers delegated to the United States by the Constitution.").

<sup>81.</sup> See, e.g., Williams v. Rhodes, 393 U.S. 23, 29 (1968) (Specific powers granted to Congress "may not be exercised in a way that violates other specific provisions of the Constitution."); Barenblatt v. United States, 360 U.S. 109, 112 (1959) ("Congress, in common with all branches of the [federal] Government, must exercise its powers subject to the limitations placed by the Constitution on government action.").

the supremacy of federal law is premised on the existence of a constitutional basis to support that law, it is important to appreciate the limits of federal power under the Constitution. The Supreme Court has enunciated certain principles which delineate the extent of power that can be exercised by the federal government within constitutional bounds.

It is well established that the federal government is a government of delegated powers, having no powers beyond those given to it by the Constitution.<sup>82</sup> The powers conferred upon Congress are specifically enumerated in article I, section 8 of the

82. Ex parte Quirin, 317 U.S. 1, 25-26 (1942); United States v. Butler, 297 U.S. 1, 63 (1936); United States v. Cruickshank, 92 U.S. 542, 550 (1876); Gilman v. Philadelphia, 70 U.S. (3 Wall.) 713, 725 (1866), See Afrovim v. Rusk, 387 U.S. 253, 257 (1967) ("Our Constitution governs us and we must never forget that our Constitution limits the [federall Government to those powers specifically granted or those that are necessary and proper to carry out the specifically granted ones."). It should be noted that the necessary and proper clause, the supremacy clause, and the preamble of the Constitution cannot support the exercise of federal power independent of the powers enumerated in the Constitution. The necessary and proper clause is not a source of federal power independent of those powers enumerated in the Constitution; rather, it merely indicates that Congress has the authority to enact legislation necessary to carry out the specific powers set forth in article I, section 8 and all other powers vested in the United States, Kinsella v. United States, 361 U.S. 234, 247 (1960); Kansas v. Colorado, 206 U.S. 46, 88 (1907)(although the Constitution should be construed in a manner that enables the federal government to exercise effectively all powers granted to it, "no independent and unmentioned power passes to the national government or can rightfully be exercised by the Congress.") Similarly, the supremacy clause is not a source of any federal power. It merely safeguards federal laws by according them priority over conflicting state law. Chapman v. Houston Welfare Rights Organization, 441 U.S. 600, 613 (1979). Furthermore, the preamble of the Constitution cannot be invoked as a source of federal power not expressly or impliedly found in the substantive provisions of the Constitution. Jacobson v. Massachusetts, 197 U.S. 11, 22 (1905)("[T]he preamble of the Constitution . . . has never been regarded as the source of any substantive power conferred on the government of the United States, or any of its departments . . . [N]o power can be exerted . . . by the United States, unless, apart from the preamble, it be found in some express delegation of power, or in some power to be properly implied therefrom."). See Carter v. Carter Coal Co., 298 U.S. 238, 291-92 (1936)(Apart from those powers delegated to it by the Constitution, Congress has no independent authority to enact laws to promote the general welfare.). Article I, section 8, clause 1 of the Constitution gives Congress the "Power to lay and collect Taxes, Duties, Imports and Excises, to pay the Debts and provide for the common Defense and general Welfare of the United States." Although the power of Congress to authorize the expenditure of federal funds for the general welfare is not restricted by the enumeration of federal powers in the Constitution, Steward Machine Co. v. Davis, 301 U.S. 548 (1937); United States v. Butler, 297 U.S. 1 (1936), the power to spend federal funds for the general welfare cannot be construed as a roving commission to enact laws for the general welfare. See United States v. Butler, 297 U.S. 1, 64 (1936)(The power to lay and collect taxes "to pay the Debts and provide for the common Defense and general Welfare" does not confer upon the federal government general or unlimited powers.).

Constitution.<sup>83</sup> The powers of Congress are not limited to those expressly enumerated in the Constitution, however, and Congress may assert those powers that can be fairly inferred from one or more of the powers specified in the Constitution, or that reasonably can be inferred from the nature of the federal system.<sup>84</sup> Under article I, section 8, clause 18,<sup>85</sup> Congress has the discretion to enact any laws that are "necessary and proper" to carry into effect those powers delegated to it.<sup>86</sup> When Congress acts within the scope of its constitutional authority, it has plenary power<sup>87</sup> and no federal law enacted pursuant to constitutional authority can be deemed an invasion of state sovereignty.<sup>88</sup>

In the past, it has been suggested that the existence of an emergency or the fact that a particular problem is national in scope would justify a relaxation of the doctrine of enumerated powers. Such suggestions have been rejected by the Supreme Court on numerous occasions. Neither war nor economic emergencies can justify the assertion of federal power not found within the Constitution or the suspension of specific constitutional provisions.<sup>89</sup> At most, an emergency provides a reason for

<sup>83.</sup> U.S. Const. art. I, § 8.

<sup>84.</sup> Perez v. Brownell, 356 U.S. 44, 57 (1958); United States v. Curtiss-Wright Export Corp., 299 U.S. 318 (1936); Jacob Ruppert, Inc. v. Caffey, 251 U.S. 264, 300 (1920); House v. Mayes, 219 U.S. 270, 281 (1911); Chicago, Burlington & Quincy R.R. v. Otoe County, 83 U.S. (16 Wall.) 667, 672 (1873); Knox v. Lee (Legal Tender Cases), 79 U.S. (12 Wall.) 457, 534 (1871).

<sup>85.</sup> U.S. Const. art. I, § 8, cl. 18.

<sup>86.</sup> The Supreme Court has defined the scope of congressional authority under the necessary and proper clause as follows: "Let the end be legitimate, let it be within the scope of the Constitution, and all means which are appropriate, which are plainly adapted to that end, which are not prohibited, but consistent with the letter and spirit of the Constitution, are constitutional." McCulloch v. Maryland, 17 U.S. (4 Wheat.) 316, 421 (1819). Accord, Case v. Bowles, 327 U.S. 92, 102 (1946); Ex parte Curtis, 106 U.S. 371, 372 (1882).

<sup>87.</sup> See, e.g., Jacob Ruppert, Inc. v. Caffey, 251 U.S. 264, 301 (1920); South Carolina v. United States, 199 U.S. 437, 448 (1905).

<sup>88.</sup> Sperry v. Florida, 373 U.S. 379, 403 (1963); Case v. Bowles, 327 U.S. 92, 102-03 (1946); Oklahoma *ex rel*. Phillips v. Guy F. Atkinson Co., 313 U.S. 508, 534 (1941); *Ex parte* Virginia, 100 U.S. 339, 346 (1880).

<sup>89.</sup> A.L.A. Schechter Poultry Corp. v. United States, 295 U.S. 495, 528-29 (1935); Exparte Milligan, 71 U.S. (4 Wall.) 2, 120-21 (1866). See Kennedy v. Mendoza-Martinez, 372 U.S. 144, 164-65 (1963) (Rights guaranteed by the fifth and sixth amendments cannot be ignored or impaired by Congress merely because of war or national emergency.); Home Bldg. & Loan Ass'n v. Blaisdell, 290 U.S. 398, 425 (1934) ("Emergency does not create power. Emergency does not increase granted power or remove or diminish the

exercising existing constitutional power in response to the crisis. 90 Furthermore, the exercise of federal authority outside the scope of the enumerated powers of Congress cannot be justified on the ground that the particular problems concerned are national in scope and, therefore, cannot be adequately handled by the individual states. 91

Without these limits, the doctrine of enumerated powers would be emasculated, and the notion that the federal government is one of specifically delegated powers would become a hollow fiction. While it is perhaps desirable, as an abstract proposition, that the federal government have the constitutional authority to act in a particular matter or subject area, it must be remembered that "[t]he question is not what power the federal [g]overnment ought to have but what powers in fact have been given by the [Constitution]."92 Although it may be frustrating to conclude that the federal government lacks constitutional authority to act in a particular manner or to deal with a specific subject matter, "beneficient aims, however great or well directed, can never serve in lieu of constitutional power."93 Simply put, the lack of constitutional authority cannot be remedied by arguments that "the ends justify the means." Of course, the

restrictions imposed upon power granted or reserved. The Constitution was adopted in a period of grave emergency. Its grants of power to the Federal Government and its limitations of the power of the States were determined in the light of emergency and they are not altered by emergency."). Cf. Youngstown Sheet & Tube Co. v. Sawyer, 343 U.S. 579 (1952) (Existence of national emergency cannot justify presidential usurpation of legislative authority.).

<sup>90.</sup> Wilson v. New, 243 U.S. 332, 348 (1917). Accord, National League of Cities v. Usery, 426 U.S. 833, 853 (1976); Home Bldg. & Loan Ass'n v. Blaisdell, 290 U.S. 398, 426 (1934).

<sup>91.</sup> Kansas v. Colorado, 206 U.S. 46, 89-92 (1907). Accord, Carter v. Carter Coal Co., 298 U.S. 238, 291-93 (1936).

The interpenetrations of modern society have not wiped out state lines. It is not for us to make inroads upon our federal system either by indifference to its maintenance or excessive regard for the unifying forces of modern technology. Scholastic reasoning may prove that no activity is isolated within the boundaries of a single state, but that cannot justify absorption of legislative power by the United States over every activity.

Polish Nat'l Alliance v. NLRB, 322 U.S. 643, 650 (1944).

<sup>92.</sup> United States v. Butler, 297 U.S. 1, 63 (1936). See Cohens v. Virginia, 19 U.S. (6 Wheat.) 264, 384-85 (1821) (Abstract arguments on the desirability of a particular course of action should not be used to construe the Constitution in a manner contrary to, or inconsistent with, the words of the Constitution itself.).

<sup>93,</sup> Carter v. Carter Coal Co., 298 U.S. 238, 291 (1936).

states may always choose to cooperate with the federal government in the resolution of problems with which they cannot cope individually. Alternatively, when faced with problems too difficult to handle within the existing framework of federal-state powers under the Constitution, the people of the United States may choose to amend the Constitution pursuant to Article V.94

Although Congress has been held to have plenary authority when it acts within the scope of its constitutional powers, <sup>95</sup> it would be a serious mistake to interpret such holdings as proof that federal power is unlimited. First, Congress has no authority to enact legislation to achieve indirectly a result that it may not constitutionally achieve directly. "Congress cannot, under the pretext of executing delegated power, pass laws for the accomplishment of objects not intrusted to the Federal Government." Thus, the federal government may not seek to exercise those powers reserved to the states or to the people. Fecond, the constitutional powers of Congress cannot be enlarged at the expense of the states merely because the states consent or submit to federal infringement of their sovereignty. Neither long-standing congressional practice nor custom and usage can justify the usurpation of authority by the federal government.

Because ours is a federal system of government, effective federal power must coexist with the effective power reserved to

<sup>94.</sup> U.S. Const. art. V.

<sup>95.</sup> See, e.g., Ivanhoe Irrigation Dist. v. McCracken, 357 U.S. 275, 294-95 (1958) (federal power over public lands under property clause); Gibbons v. Ogden, 22 U.S. (9 Wheat.) 1, 196 (1824) (federal authority over interstate commerce); note 87 supra.

<sup>96.</sup> Linder v. United States, 268 U.S. 5, 17 (1925). Accord, Ashwander v. Tennessee Valley Auth., 297 U.S. 288, 326 (1936); United States v. Butler, 297 U.S. 1, 69 (1936).

<sup>97.</sup> Kilbourn v. Thompson, 103 U.S. 168, 182 (1881); People's Ferry Co. v. Beers, 61 U.S. (20 How.) 393, 401 (1858). See National League of Cities v. Usery, 426 U.S. 833 (1976) (Congress may not exercise its power under the commerce clause in a manner which overrides state sovereignty over integral state functions.); United States v. Ohio Oil Co. (Pipe Line Cases), 234 U.S. 548, 560-61 (1914)("The control of Congress over commerce among the states cannot be made a means of exercising powers not intrusted to it by the Constitution . . . .").

<sup>98.</sup> Ashton v. Cameron County Water Improvement Bd., 298 U.S. 513, 531 (1936). See Carter v. Carter Coal Co., 298 U.S. 238, 295 (1936).

<sup>99.</sup> See Walz v. Tax Comm'n, 397 U.S. 664, 678 (1970)("[N]o one acquires a vested or protected right in violation of the Constitution by long use, even when that span of time covers our entire national existence . . . ."). Accord, McGautha v. California, 402 U.S. 183, 203 (1971). Cf. United States v. Martinez-Fuerte, 428 U.S. 543, 566 n.19 (1976) ("[N]either longstanding congressional authorization nor widely prevailing practice justifies a constitutional violation.") (fourth amendment case).

the individual states. The tenth amendment<sup>100</sup> incorporates this principle of federalism and stands as an obstacle to unlimited federal power. The plain language of the amendment makes clear that the federal government is not omnipotent, and that the states are not powerless. 101 The recent indifference and hostility toward the tenth amendment is unwarranted and contrary to established principles of constitutional construction. Words used in the Constitution cannot be deemed meaningless or considered as mere surplusage that can be ignored or eliminated by courts at their leisure. 102 The plain meaning of a constitutional provision not contradicted by any other provision in the Constitution is not to be disregarded.103 Furthermore, just as grants of power to Congress are to be construed in a manner permitting the powers granted to be carried into full effect, prohibitions or limitations upon the powers of Congress should be construed in a manner consistent with their spirit and intent. An unduly narrow and technical construction of restrictions on federal power is unwarranted.104

The reach of federal power is limited by the essential nature of the powers reserved to the states by the Constitution, <sup>105</sup> and Congress cannot override or impair the basic attributes of state sovereignty even when exercising its otherwise plenary powers. <sup>106</sup>

<sup>100.</sup> U.S. Const. amend. X.

<sup>101.</sup> U.S. Const. amend. X. "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." Id.

<sup>102.</sup> Richfield Oil Corp. v. State Bd. of Equalization, 329 U.S. 69, 77-78 (1946); United States v. Butler, 297 U.S. 1, 65 (1936); Blake v. McClung, 172 U.S. 239, 260-61 (1898); Holmes v. Jennison, 39 U.S. (14 Pet.) 540, 570-71 (1840). See Marbury v. Madison, 5 U.S. (1 Cranch.) 137, 174 (1803) ("It cannot be presumed that any clause in the Constitution is intended to be without effect; and, therefore such a construction is inadmissible, unless the words require it.").

<sup>103.</sup> Sturges v. Crowinshield, 17 U.S. (4 Wheat.) 122, 202-03 (1819).

<sup>104.</sup> Kansas v. Colorado, 206 U.S. 46, 90-91 (1907).

<sup>105.</sup> Andrews v. Andrews, 188 U.S. 14, 34 (1903).

<sup>106.</sup> National League of Cities v. Usery, 426 U.S. 833, 842 (1976). See World-Wide Volkswagen Corp. v. Woodson, 444 U.S. 286, 293 (1980) (The economic interdependence of the states foreseen by the framers of the Constitution and protected by the commerce clause is not inconsistent with the framers' intention that the states retain many essential attributes of sovereignty.); Colorado v. Symes, 286 U.S. 510, 518 (1932)("[I]t is axiomatic that the right of the States, consistently with the Constitution and laws of the United States, to make and enforce their own laws is equal to the right of the federal government to exert exclusive and supreme power in the field that by virtue of the Constitution belongs to it.").

This proposition follows from the principle that the preservation of separate and independent autonomous states is "as much within the design and care of the Constitution as the preservation of the Union and the maintenance of the National government."<sup>107</sup>

#### C. Radiation Hazards and Federal Preemption

The weight of authority supports the proposition that Congress intended wholly to preclude any state regulation of radiological hazards associated with nuclear power. It has been argued that the pervasive scheme of federal regulation indicates a congressional intent to preclude state regulation of nuclear power (and radiation hazards) except when authorized by a turnover agreement under the Atomic Energy Act. It also has been argued that state laws on radiation hazards constitute obstacles "to the accomplishment and execution of the full purposes and objectives of Congress" in promoting commercial nuclear power. Section 274 of the Atomic Energy Act and its legislative history indicate a definite congressional intent to preclude state regulation of radiation hazards associated with nuclear power. Furthermore, the grant of statutory authority

<sup>107.</sup> Texas v. White, 74 U.S. (7 Wall.) 700, 725 (1869), overruled on other grounds, Morgan v. United States, 113 U.S. 476, 496 (1885) quoted with approval in Ashton v. Cameron County Water Improvement Dist., 298 U.S. 513, 528 (1936) and South Carolina v. United States, 199 U.S. 437, 453 (1907).

<sup>108.</sup> Northern States Power Co. v. Minnesota, 447 F.2d 1143 (8th Cir. 1971), aff'd mem., 405 U.S. 1035 (1972). Accord, Pacific Legal Foundation v. State Energy Resources Conservation & Dev. Comm'n, 472 F. Supp. 191, 197-200 (S.D. Cal. 1979); United States v. City of New York, 463 F. Supp. 604 (S.D.N.Y. 1978); Commonwealth Edison Co. v. Pollution Control Bd., 5 Ill. App. 3d 800, 284 N.E.2d 342 (1972); Marshall v. Consumers Power Co., 65 Mich. App. 237, 245-55, 237 N.W.2d 266, 274-78 (1975); Utility Consumers Council v. Public Serv. Comm'n, 562 S.W.2d 688, 698-99 (Mo. App. 1978), cert. denied, 439 U.S. 866 (1978); State Dep't of Environmental Protection v. Jersey Cent. Power & Light Co., 69 N.J. 102, 110-13, 351 A.2d 337, 342-44 (1976). See generally Estep & Adelman, supra note 34, at 58-63; Green & Zell, supra note 3; Lucas, supra note 3, at 940-49; Murphy & La Pierre, supra note 1.

<sup>109.</sup> Northern States Power Co. v. Minnesota, 447 F.2d 1143, 1152-53 (8th Cir. 1971), aff'd mem., 405 U.S. 1035 (1972). Accord, United States v. City of New York, 463 F. Supp. 604 (S.D.N.Y. 1978).

<sup>110.</sup> Pacific Legal Foundation v. State Energy Resources Conservation & Dev. Comm'n, 472 F. Supp. 191, 200-01 (S.D. Cal. 1979).

<sup>111.</sup> See text accompanying notes 28-34 supra. A few commentators have argued that Congress has not sought to preempt the states completely in the regulation of radiation hazards. See Meeks, supra note 3; Tribe, California Declines the Nuclear Gamble:

over nuclear waste management to the Department of Energy<sup>112</sup> indicates a congressional intent to preempt the field.

Even assuming that Congress intended to preempt the states from regulating radiation hazards, however, it is still necessary to consider whether Congress acted pursuant to constitutional authority when it enacted legislation governing radiation hazards and nuclear waste disposal. To the extent that regulation of radiological hazards is incidental to the exercise of an enumerated power of Congress, federal regulation of nuclear waste is constitutionally permissible. To the extent that such regulation is not incidental to the exercise of an enumerated power of Congress, its constitutionality is questionable.

#### IV. CONSTITUTIONAL BASES FOR FEDERAL REGULATION OF NUCLEAR WASTE

The Atomic Energy Act of 1954, case law, and various commentaries suggest several possible sources of federal power to regulate radiation hazards, including nuclear waste. Among these sources of federal power are the following: (1) the war powers clauses, (2) federal authority to conduct foreign affairs, (3) the property clause, (4) the doctrine of intergovernmental immunities, (5) federal power over admiralty and navigable waters, (6) the commerce clause, (7) federal authority to promote the general welfare, and (8) to protect the general public.<sup>114</sup> An

is such a State Choice Preempted?, 7 Ecology L.Q. 679 (1979). The arguments put forth by these commentators seem strained or implausible in light of the almost overwhelming evidence of congressional intent to preclude state regulation of radiation hazards. And they are built on a shaky foundation. The arguments accept the premise that Congress constitutionally can, if it so chooses, preempt explicitly state regulation in the field. Accordingly, these arguments would become useless the moment Congress clearly expressed its intent to preempt the field.

<sup>112.</sup> See text accompanying notes 39-42 supra.

<sup>113.</sup> See text accompanying notes 79 & 80 supra.

<sup>114.</sup> See Northern States Power Co. v. Minnesota, 447 F.2d 1143, 1147 (8th Cir. 1971), aff'd mem., 405 U.S. 1035 (1972); New Hampshire v. AEC, 406 F.2d 170, 174 n.4 (1st Cir. 1969), cert. denied, 395 U.S. 962 (1969); 42 U.S.C. §§ 2011-2013 (1976); Id. § 7901 (Supp. II 1978). See generally Estep, Federal Control of Health and Safety Standards in Peacetime Private Atomic Energy Activities, 52 Mich. L. Rev. 333 (1954); Estep & Adelman, supra note 34, at 44-63; Green & Zell, supra note 3; Lucas, supra note 3, at 936-38; Murphy & La Pierre, supra note 1, at 434-37; Swan, Management of High-Level Radioactive Wastes: The AEC and the Legal Process, 1973 Law & Soc. Order 263, 287 (1973); Note, State Regulation of Nuclear Facility Hazards: A Case of Federal Preemption, 8 Loy. Chi. L.J. 594, 603-04 (1977).

examination of these purported bases for federal authority reveals that some are valid sources of federal authority over nuclear waste while others are not. None provides the federal government with general authority over radiation hazards under all circumstances.

#### A. War Powers Clauses

The federal government has undisputed authority to regulate matters concerning the military and affecting national security and the common defense of the United States. 115 It seems self-evident that the United States has authority over all aspects of nuclear weapons, including the radiation hazards associated with them. For instance, the federal government clearly has authority to regulate nuclear waste generated by the research, development, and production of nuclear warheads. Special nuclear material is, by definition, material which can be used in the production of nuclear weapons. 116 Because spent nuclear fuel contains special nuclear material, which can be recovered chemically, 117 the regulation of spent nuclear fuel is a matter of interest to the federal government. Given the undeniable federal nature of the war powers, any state legislation purporting to regulate nuclear waste associated with the military would be struck down under the supremacy clause. Similarly, any state legislation purporting to regulate radioactive waste containing significant amounts of special nuclear material (e.g., spent nuclear fuel) would face a serious preemption challenge.

Nevertheless, the courts should not presume that federal power to regulate special nuclear material under the war powers clauses is unlimited. While the courts should give great deference to congressional declarations concerning the need to regulate special nuclear material for the common defense and national security, they must realize that a blind deference to such declarations might enable the federal government to exceed the reasonable limits of its constitutional authority. Although it is conceivable that any material or natural resource may become useful or necessary in a war or national emergency, it does not

<sup>115.</sup> U.S. Const. art. I, § 8, cls. 11-16.

<sup>116.</sup> See 42 U.S.C. § 2014aa (1976). See also id. §§ 2071-2078, 2121 (1976 & Supp. II 1978 & Supp. III 1979).

<sup>117.</sup> Jaksetic, supra note 2, at 349 n.7.

necessarily follow that Congress has constitutional authority to regulate such materials or resources under all circumstances. Such as expansive interpretation of the scope of the war powers clauses, if not restrained by a rule of reason, would enable Congress to subsume the rest of the Constitution thereunder and would emasculate the doctrine of enumerated powers.<sup>118</sup>

Obviously not every aspect of nuclear power falls within the scope of the federal war powers. While Congress has broad discretion under the war powers clauses, it must exercise such powers subject to applicable constitutional limitations. Since Congress cannot exercise any of its enumerated powers in a manner calculated to accomplish objectives not entrusted to the federal government by the Constitution, the war powers clauses cannot be invoked to achieve ends not rationally related to national security and the common defense. Because low-level radioactive waste and some types of long-lived wastes (e.g., Ni-63 and Ni-59 activation products) do not contain bomb-grade nuclear material, it would not be plausible to argue that their regulation by the federal government is reasonably related to national security and the common defense.

#### B. Federal Authority to Conduct Foreign Affairs

Federal authority over the conduct of foreign relations is indisputable.<sup>123</sup> Because no state legislation concerning nuclear waste appears to regulate or to infringe upon federal regulation of the international aspects of nuclear energy, this constitutional basis of federal power over nuclear materials (including nuclear waste) is inapposite to this Article.

<sup>118.</sup> See text accompanying notes 89-91 supra.

<sup>119.</sup> Silesian-American Corp. v. Clark, 332 U.S. 469, 476 (1947); Hirabayashi v. United States, 320 U.S. 81, 93 (1943); Stewart v. Kahn, 78 U.S. (11 Wall.) 493, 506-07 (1871).

<sup>120.</sup> United States v. Robel, 389 U.S. 258, 263-64 (1967); Hamilton v. Kentucky Distilleries Co., 251 U.S. 146, 156 (1919). See also text accompanying notes 89 & 90 supra.

<sup>121.</sup> See text accompanying notes 96 & 97 supra.

<sup>122.</sup> See, e.g., United States v. Robel, 389 U.S. 258, 263 (1967) ("However, the phrase 'war power' cannot be invoked as a talismanic incantation to support any exercise of congressional power which can be brought within its ambit.").

<sup>123.</sup> E.g., Zschernig v. Miller, 389 U.S. 429 (1968); United States v. Pink, 315 U.S. 203, 233-34 (1942); United States v. Curtiss-Wright Export Corp., 299 U.S. 304, 315-18 (1936).

#### C. Property Clause

The Constitution provides that "[t]he Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States." Under the property clause, the federal government has plenary power over all its property, real or otherwise, and the power is analogous to the police power of the states. This plenary power excludes the exercise of any state or local authority which might interfere with or obstruct federal control of property belonging to the United States. Accordingly, the federal government has constitutional authority to regulate nuclear materials, including radioactive waste, which belong to it. 127

#### D. The Doctrine of Intergovernmental Immunities

The doctrine of intergovernmental immunities precludes the states from seeking to control, affect, impede, or burden agents or instrumentalities of the federal government.<sup>128</sup> The United States may perform its governmental functions without conforming to the police regulation of the states,<sup>129</sup> unless there is a "clear and unambiguous" congressional authorization for federal installations to be subject to state regulation.<sup>130</sup> The Supreme Court has given the doctrine of intergovernmental immunities

<sup>124.</sup> U.S. Const. art. IV, § 3, cl. 2. See also U.S. Const. art. I, § 8, cl. 17. "[The Congress shall have Power] [t]o exercise exclusive Legislation in all Cases whatsoever, over . . . all Places purchased by the Consent of the Legislature of the State in which the Same shall be, for the Erection of Forts, Magazines, Arsenals, Dock-Yards, and other needful Buildings." Id.

<sup>125.</sup> Kleppe v. New Mexico, 426 U.S. 529 (1976); Ivanhoe Irrigation Dist. v. McCracken, 357 U.S. 275, 294-95 (1958); Alabama v. Texas, 347 U.S. 272 (1954); Canfield v. United States, 167 U.S. 518 (1897).

<sup>126.</sup> Ivanhoe Irrigation Dist. v. McCracken, 357 U.S. 275, 295 (1958); Wisconsin Cent. R.R. v. Price County, 133 U.S. 496, 504 (1890).

<sup>127.</sup> The relationship between the property clause and the Constitution, U.S. Const. art. I, § 8, cl. 17, will be discussed in another section of this Article. See text accompanying notes 239-48 infra.

<sup>128.</sup> United States v. Georgia Pub. Serv. Comm'n, 371 U.S. 285, 298 (1963); Farmers' & Mechanics' Nat'l Bank v. Dearing, 91 U.S. 29, 34 (1875); McCulloch v. Maryland, 17 U.S. (4 Wheat.) 316 (1819).

<sup>129.</sup> Public Util. Comm'n v. United States, 355 U.S. 534 (1958); Arizona v. California, 283 U.S. 423, 451-52 (1931).

<sup>130.</sup> Hancock v. Train, 426 U.S. 167, 178-79 (1976); EPA v. California State Water Resources Control Bd., 426 U.S. 200, 211 (1976).

an expansive interpretation. For instance, a federal official acting pursuant to federal law cannot be convicted or fined even though his conduct violates state law, <sup>131</sup> and a private contractor acting under a valid federal contract cannot be convicted for failure to comply with a state law requiring a state license. <sup>132</sup>

Under the Energy Reorganization Act of 1974 and the Department of Energy Organization Act of 1977, high-level radioactive waste repositories are to be controlled by the Department of Energy and licensed by the NRC.<sup>133</sup> Any state regulation of high-level radioactive waste repositories would necessarily include regulation of instrumentalities and agents of the United States or private contractors working under federal contract. Such regulation would seem wholly precluded by the doctrine of intergovernmental immunities as it is presently construed.

While the doctrine of intergovernmental immunities appears to present an ironclad case for federal preemption, there are grounds for collateral attack on the notion that federal radioactive waste repositories are immune from state regulation. The doctrine of intergovernmental immunities shields instrumentalities and officials of the federal government from state regulation insofar as they are carrying out valid functions of the United States. To the extent that delegated functions are not validly within the scope of congressional power, the doctrine of intergovernmental immunities is inapplicable. Thus, if a state can demonstrate that federal officials engaged in the handling and disposal of radioactive waste are acting without constitutional authority, the state may require those officials to comply with applicable state laws. The intergovernmental immunities is inapplicable to comply with applicable state laws. The intergovernmental immunities is inapplicable to comply with applicable state laws. The intergovernmental immunities is inapplicable to comply with applicable state laws. The intergovernmental immunities is inapplicable to comply with applicable state laws. The intergovernmental immunities is inapplicable to comply with applicable state laws.

<sup>131.</sup> Johnson v. Maryland, 254 U.S. 51 (1920); Ohio v. Thomas, 173 U.S. 276 (1899). 132. Leslie Miller, Inc. v. Arkansas, 352 U.S. 187 (1956). See Carson v. Roane-Anderson Co., 342 U.S. 232 (1952)(Activities of private corporation performed under contract with Atomic Energy Commission were activities of the Commission and, therefore, were exempt from state and local taxes).

<sup>133. 42</sup> U.S.C. § 5842 (1976 & Supp. II 1978 & Supp. III 1979); id. § 7133(a)(8) (Supp. II 1978 & Supp. III 1979). As pointed out earlier, there is a potential gap in the statutory authority of the NRC to license nuclear waste repositories. See note 41 supra.

<sup>134.</sup> It is axiomatic that Congress cannot delegate authority it does not possess under the Constitution. See L. Tribe, American Constitutional Law 285 (1978).

<sup>135.</sup> See Bivens v. Six Unknown Named Agents, 403 U.S. 388 (1971) (Even though acting under color of federal authority, federal agents may be held liable for injuries arising out of their violations of fourth amendment rights.); Ex parte Young, 209 U.S. 123, 159-60 (1908) (When a state official attempts to use state authority to enforce an unconstitutional statute, he is stripped of his official or representative character and can

regulation of radiation hazards is constitutional, however, it is unlikely that a state would prevail with this argument in federal courts.

#### E. Federal Authority Over Admiralty and Navigable Waters

It is well established that Congress has authority to regulate maritime matters and matters relating to navigable waters. <sup>136</sup> Congressional authority over navigable waters derives from its authority over interstate and foreign commerce. <sup>137</sup> While the states have concurrent jurisdiction over navigable waters, federal law preempts any conflicting state law. <sup>138</sup> Given its constitutional authority to regulate naviable waters and maritime matters, Congress clearly was acting within the scope of its authority when it enacted legislation prohibiting the dumping of radioactive materials into the oceans or navigable waters. <sup>139</sup> Since no state law purports to authorize such dumping, there is no problem of preemption in this area of nuclear waste management.

#### F. Commerce Clause

The central purposes of the commerce clause are to ensure uniform regulation of interstate commerce against discriminatory state regulation,<sup>140</sup> to prevent any state from placing itself in economic isolation from its sister states or establishing economic barriers against competition with another state,<sup>141</sup> and to protect interstate commerce from economic forces inimical to or destructive of the national economy.<sup>142</sup> Given the nature of its purposes, it is not surprising that the commerce clause imposes a

be held liable individually for his action.).

<sup>136.</sup> Romero v. International Terminal Operating Co., 358 U.S. 354, 360-62 (1959); O'Donnell v. Great Lakes Dredge & Dock Co., 318 U.S. 36, 39-41 (1943); Arizona v. California, 283 U.S. 423 (1931); Economy Light & Power Co. v. United States, 256 U.S. 113 (1921).

<sup>137.</sup> E.g., City of Tacoma v. Taxpayers of Tacoma, 357 U.S. 320, 334 (1958).

<sup>138.</sup> Huron Portland Cement Co. v. Detroit, 362 U.S. 440, 442-44 (1960).

<sup>139.</sup> See notes 62-64 and accompanying text supra.

<sup>140.</sup> Hughes v. Oklahoma, 441 U.S. 322, 325-26 (1979); Houston, E. & W. Tex. Ry. v. United States (Shreveport Rate Case), 234 U.S. 342, 350-51 (1914); Welton v. Missouri, 91 U.S. 275, 280 (1876).

<sup>141.</sup> Dean Milk Co. v. City of Madison, 340 U.S. 349, 356 (1951); Baldwin v. G.A.F. Seelig, Inc., 294 U.S. 511, 527 (1935). See Boston Stock Exch. v. State Tax Comm'n, 429 U.S. 318, 329 (1977).

<sup>142.</sup> North Am. Co. v. SEC, 327 U.S. 686, 705 (1946).

limitation upon the power of the states even in the absence of congressional action.<sup>143</sup>

Congress has plenary authority to regulate interstate and foreign commerce. 144 Congress also may regulate intrastate activities that are so closely related to interstate commerce that regulation of the former is necessary for the effective regulation of the latter.148 In Houston, East & West Texas Railway v. United States (Shreveport Rate Case), 146 the Supreme Court held that Congress may regulate activities having "a close and substantial relation" to interstate commerce even though the activities themselves are not interstate commerce.147 Accordingly, Congress may regulate local activities that exert "a substantial economic effect on interstate commerce," whether the effect on interstate commerce is direct or indirect. 148 Local activities that combine to produce a substantial effect on interstate commerce are subject to congressional regulation even though the effect of each activity viewed separately is trivial.149 Furthermore, when a class of activities is within the reach of federal power under the commerce clause, "the courts have no power 'to excise, as trivial, individual instances' of the class."150

When acting within the scope of its constitutional authority over interstate commerce, Congress may enact legislation which has the quality of police regulations.<sup>151</sup> Once it is determined

<sup>143.</sup> Freeman v. Hewit, 329 U.S. 249, 252 (1946). Accord, Great Atl. & Pac. Tea Co. v. Cottrell. 424 U.S. 366, 370-71 (1976).

<sup>144.</sup> Gibbons v. Ogden, 22 U.S. (9 Wheat.) 1, 196 (1824). Accord, American Power & Light Co. v. SEC, 329 U.S. 90, 100 (1946); United States v. Darby, 312 U.S. 100, 114-15 (1941); Simpson v. Shepard (Minnesota Rate Cases), 230 U.S. 352, 398 (1913). Within the scope of its plenary power, Congress may enact legislation for the protection of the instrumentalities of interstate and foreign commerce. Perez v. United States, 402 U.S. 146, 150 (1971).

<sup>145.</sup> Simpson v. Shepard (Minnesota Rate Cases), 230 U.S. 352, 399 (1913).

<sup>146. 234</sup> U.S. 342 (1914).

<sup>147.</sup> Id. at 351. Accord, Heart of Atlanta Motel v. United States, 379 U.S. 241 (1964); United States v. Darby, 312 U.S. 100, 119-20 (1941); NLRB v. Jones & Laughlin Steel Corp., 301 U.S. 1, 37 (1937); United States v. Ferger, 250 U.S. 199, 203 (1919).

<sup>148.</sup> Perez v. United States, 402 U.S. 146, 151-52 (1971); Wickard v. Filburn, 317 U.S. 111, 125 (1942).

<sup>149.</sup> Katzenbach v. McClung, 379 U.S. 294, 300-01 (1964); Mandeville Island Farms, Inc. v. American Crystal Sugar Co., 334 U.S. 219, 236 (1948); Wickard v. Filburn, 317 U.S. 111, 127-28 (1942).

<sup>150.</sup> Perez v. United States, 402 U.S. 146, 154 (1971).

<sup>151.</sup> Currin v. Wallace, 306 U.S. 1, 11-12 (1939); United States v. Carolene Prods. Co., 304 U.S. 144, 147 (1938).

that Congress is acting within the scope of its authority under the commerce clause, the judiciary will not inquire into the motives of Congress in enacting particular legislation or review whether the policy behind the statute is a wise or correct one. 152 Although Congress has broad discretion in the exercise of its authority under the commerce clause, it cannot exercise that authority in a manner plainly violative of the Constitution, 153 as a means of exercising powers not entrusted to it by the Constitution,154 or in a way "directly displac[ing] the States' freedom to structure integral operations in areas of traditional governmental functions."155 It is crucial to understand that the commerce clause, as judicially expanded by the Shreveport doctrine, is not only a grant of power, but also a limitation upon the power granted to Congress. More specifically, the commerce clause limits Congress with "respect to what constitutes interstate commerce, including whatever rightly may be found to affect it sufficiently to make Congressional regulation necessary or appropriate."156 The commerce power does not extend to anything not having "a real or substantial relation to some part of [interstate] commerce,"187 nor does it give Congress authority to regulate matters that are essentially local in nature. 158 Congress constitutionally cannot enact legislation concerning matters having such indirect or remote effects upon interstate commerce that such

<sup>152.</sup> United States v. Orito, 413 U.S. 139, 144 (1973); Oklahoma ex rel. Phillips v. Guy F. Atkinson Co., 313 U.S. 508, 528 (1941); United States v. Joint-Traffic Ass'n, 171 U.S. 505, 573 (1898).

<sup>153.</sup> Secretary of Agriculture v. Central Roig Ref. Co., 338 U.S. 604, 616 (1950); Virginian Ry. v. System Fed'n No. 40, 300 U.S. 515, 558 (1937); Adair v. United States, 208 U.S. 161, 177 (1908); Champion v. Ames (Lottery Case), 188 U.S. 321, 353 (1903).

<sup>154.</sup> United States v. Ohio Oil Co. (Pipe Line Cases), 234 U.S. 548, 560-61 (1914). See text accompanying note 96 supra.

<sup>155.</sup> National League of Cities v. Usery, 426 U.S. 833, 852 (1976).

<sup>156.</sup> Prudential Ins. Co. v. Benjamin, 328 U.S. 408, 423 (1946). See Katzenbach v. McClung, 379 U.S. 294, 303-04 (1964) (When Congress regulates local activity deemed to affect interstate commerce, there must be "a rational basis for [Congress' determination that] a chosen regulatory scheme [is] necessary to the protection of [interstate] commerce . . . "); Heart of Atlanta Motel v. United States, 379 U.S. 241, 261-62 (1964)(In regulating interstate commerce, Congress must choose means "reasonably adapted to the end permitted by the Constitution.").

<sup>157.</sup> Mondou v. New York, N.H. & H. R.R., 223 U.S. 1, 47 (1912). See also Katzenbach v. McClung, 379 U.S. 294, 302 (1964); Santa Cruz Fruit Packing Co. v. NLRB, 303 U.S. 453, 466 (1938).

<sup>158.</sup> Houston, E. & W. Tex. Ry. v. United States (Shreveport Rate Case), 234 U.S. 342, 353 (1914); Gibbons v. Ogden, 22 U.S. (9 Wheat.) 1, 195 (1824).

regulation "would effectively obliterate the distinction between what is national and what is local and create a completely centralized government." <sup>159</sup>

Since the New Deal, the Supreme Court has given an expansive interpretation to the scope of federal power under the commerce clause. This expansive interpretation has led some commentators to propose that the commerce power has no discernable limitations since virtually any legislation can be premised on some possible connection between the matter to be regulated and interstate commerce. The expansive interpretations of the commerce power have gotten out of hand. If the doctrine of enumerated powers and the tenth amendment are to be preserved, the courts must reject arguments that remote and speculative effects upon interstate commerce are adequate or sufficient grounds for federal regulation. Courts must consider carefully whether there is a rational basis for congressional de-

<sup>159.</sup> NLRB v. Jones & Laughlin Steel Corp., 301 U.S. 1, 37 (1937).

The interpenetrations of modern society have not wiped out state lines. It is not for us to make inroads upon our federal system either by indifference to its maintenance or excessive regard for the unifying forces of modern technology. Scholastic reasoning may prove that no activity is isolated within the boundaries of a single State, but that cannot justify absorption of legislative power by the United States over every activity.

Polish Nat'l Alliance v. NLRB, 322 U.S. 643, 650 (1944). Whether a particular activity affects interstate commerce in such a close and substantial fashion as to render it subject to federal regulation is a matter to be decided on a case-by-case basis. Consolidated Edison Co. v. NLRB, 305 U.S. 197, 222 (1938). Although Congress has great discretion in determining whether particular activities affect interstate commerce and, therefore, are proper subjects for federal regulation, the federal courts have the constitutional authority and duty to determine whether Congress exceeded the reasonable limits of its discretion in deciding to regulate such activities. Polish Nat'l Alliance v. NLRB, 322 U.S. 643, 650 (1944). See Perez v. United States, 402 U.S. 146, 152 (1971); Heart of Atlanta Motel v. United States, 379 U.S. 241, 258 (1964). Notwithstanding the deference the judiciary must accord to a congressional assertion that Congress is acting within the scope of its constitutional powers, the judicary has the responsibility to determine the constitutionality of federal law. Woods v. Cloyd W. Miller Co., 333 U.S. 138, 144 (1948); United States v. Carolene Prods. Co., 304 U.S. 144, 152 (1938); United States v. Butler, 297 U.S. 1, 67 (1936). See United States v. Nixon, 418 U.S. 683, 704-05 (1974).

<sup>160.</sup> See, e.g., Bogen, The Hunting of the Shark: An Inquiry into the Limits of Congressional Power Under the Commerce Clause, 8 Wake Forest L. Rev. 187 (1972).

<sup>161.</sup> See Heart of Atlanta Motel v. United States, 379 U.S. 241, 275 (1964)(Black, J., concurring)("[E]very remote, possible, speculative effect on commerce should not be accepted as an adequate constitutional ground to uproot and throw into the discard all our traditional distinctions between what is purely local, and therefore controlled by state laws, and what affects the national interest and is therefore subject to control by federal laws.").

terminations that particular statutes affecting local activities are necessary to protect interstate commerce and whether the means chosen by Congress are reasonably adapted to the purposes of the commerce clause.<sup>162</sup>

The question arises whether there is a reasonable method for determining what activities affect interstate commerce. To make such a determination, it is necessary to consider the purposes of the commerce clause<sup>163</sup> and to analyze the particular activities concerned in light of these purposes. The *Shreveport* doctrine should not be construed to permit congressional regulation of activities that conceivably might affect interstate commerce. Arguments for subsuming intrastate activities under the commerce clause according to the *Shreveport* doctrine should be "something more than an ingenious academic exercise in the conceivable." At most, the *Shreveport* doctrine should be construed to cover activities likely to affect interstate commerce. <sup>165</sup>

As the foregoing discussion shows, the commerce clause cannot provide a constitutional basis for federal regulation of all aspects of radioactive wastes. In Northern States Power Co. v. Minnesota, 166 the Eighth Circuit Court of Appeals concluded that Congress had exercised its "constitutionally granted powers over the common defense and security, interstate and foreign commerce and promotion of the general welfare" when it enacted the comprehensive system of regulation composing the Atomic Energy Act. 167 Except for its citation of two law review

<sup>162.</sup> See Heart of Atlanta Motel v. United States, 379 U.S. 241, 261-62 (1964)(In regulating interstate commerce, Congress must choose means "reasonably adapted to the end permitted by the Constitution."); Katzenbach v. McClung, 379 U.S. 294, 303-04 (1964)(When Congress regulates local activity deemed to affect interstate commerce, there must be a "rational basis for [Congress' determination that] a chosen regulatory scheme [is] necessary to the protection of [interstate] commerce.").

<sup>163.</sup> See text accompanying notes 140-42 supra.

<sup>164.</sup> Cf. United States v. SCRAP, 412 U.S. 669, 688 (1973)(In standing cases, "pleadings must be something more than an ingenious academic exercise in the conceivable."). See also note 161 supra.

<sup>165.</sup> Quaere whether a speculative possibility could have a "close and substantial" relationship to interstate commerce. Just as the federal courts cannot engage in rendering advisory opinions in cases involving no real dispute or controversy, Congress should not be permitted to enact legislation to regulate intrastate activities that conceivably could, but actually do not have an effect upon, or connection with, interstate commerce.

<sup>166. 447</sup> F.2d 1143 (8th Cir. 1971), aff'd mem., 405 U.S. 1035 (1972).

<sup>167.</sup> Id. at 1146.

articles,<sup>168</sup> however, the court provided no analytical support for this conclusion. The court should have considered more carefully the threshhold question whether the commerce clause<sup>169</sup> can support congressional authority to preempt the states from regulating radiation hazards associated with nuclear power. Consideration of this question is particularly apposite in this context because of the traditional power of the states over public health and safety. The mere assertion by Congress that it was acting within the scope of its constitutional authority is not sufficient to preclude judicial scrutiny of the claim.<sup>170</sup>

Northern States Power Co. should be limited to its facts. In that case, the issues concerned radiological hazards associated with the operation of a commercial nuclear power plant. Congress has the authority to regulate the interstate transmission of electricity<sup>171</sup> and, under the Shreveport doctrine, the authority to regulate intrastate transmission of electricity that affects commerce among the states. Since almost all major power plants generate electricity for an interstate grid, the class of intrastate generation facilities has an impact upon interstate commerce and, therefore, is within the scope of the commerce clause. 172 In short, Northern States Power Co. concerned preemption based on the commerce clause, not some implied constitutional authority of Congress to regulate public health and safety. 173 To the extent that radiation hazards are not part of interstate commerce and do not have a "close and substantial relation" thereto, such hazards constitutionally cannot be regulated under the commerce clause.

Commentators have acknowledged that there is no general federal police power to enact legislation to protect the public

<sup>168.</sup> Id. at 1147 n.2 (citing Estep & Adelman, supra note 34; Estep, Federal Control of Health and Safety Standards in Peacetime Atomic Energy Activities, 52 Mich. L. Rev. 333 (1954)).

<sup>169.</sup> For a discussion of the war powers and the general welfare clauses as sources of federal power to regulate radiation hazards and nuclear waste, see text accompanying notes 115-22 supra and notes 185-87 infra.

<sup>170.</sup> See note 159 supra.

<sup>171.</sup> E.g., Chemehuevi Tribe of Indians v. FPC, 420 U.S. 395, 400 (1975); FPC v. Union Elec. Co., 381 U.S. 90, 94 (1965); Utah Power & Light Co. v. Pfost, 286 U.S. 165, 182 (1932).

<sup>172.</sup> Murphy & La Pierre, supra note 1, at 436 n.241; Parenteau, supra note 1, at 705.

<sup>173.</sup> Parenteau, supra note 1, at 705.

health and safety.174 The legislation that has been enacted by the federal government affecting the public health and safety has been based on the commerce clause. 175 In the absence of an express constitutional provision giving the federal government authority over matters concerning the public health and safety, the exercise of such authority must derive from some enumerated power of Congress. 176 The Supreme Court has highlighted the lack of a general federal power over matters of public health and safety by recognizing the traditionally broad powers of the states over health and safety.177 Any claim that the commerce clause gives the federal government general police powers must be rejected as wholly unsupported by the plain language and purposes of the commerce clause. The Supreme Court has indicated that the purpose of the commerce clause is to "create an area of free trade among the several States"178 and "to ensure a national economy free from . . . unjustifiable local entanglements."179 The commerce clause provides a standard by which "to determine the rules of intercourse across state lines . . . essential to weld a loose confederacy into a single, indivisible Nation"180 and to prevent parochial state legislation "calculated to open 'the door . . . to rivalries and reprisals that were meant to be averted by subjecting commerce between the states to the power of the nation.' "181 None of these purposes suggests that the framers of the Constitution intended the commerce clause to

<sup>174.</sup> Murphy & La Pierre, supra note 1, at 399.

<sup>175.</sup> Chapman & Talmadge, Historical and Political Background of Federal Health Care Legislation, 35 LAW & CONTEMP. PROB. 334 (1970).

<sup>176.</sup> Simpson v. Shepard (Minnesota Rate Cases), 230 U.S. 352, 411 (1913). See House v. Mayes, 219 U.S. 270, 282 (1911) (The states' police powers to protect life, liberty, and property, and to conserve public health always belonged to the states and were not surrendered to the federal government.); Arkansas v. Kansas & Tex. Coal Co., 183 U.S. 185, 189 (1901).

<sup>177.</sup> Barsky v. Board of Regents, 347 U.S. 442, 449 (1954); Simpson v. Shepard (Minnesota Rate Cases), 230 U.S. 352, 411 (1913); Jacobson v. Massachusetts, 197 U.S. 11 (1905); Gibbons v. Ogden, 22 U.S. (9 Wheat.) 1, 203-04 (1824). Of course, the police powers of the states may not be invoked to invade the domain of the federal government. Southern Pac. Co. v. Arizona, 325 U.S. 761, 779-80 (1945); Reid v. Colorado, 187 U.S. 137, 151 (1902); Hannibal & St. Joseph R.R. v. Husen, 95 U.S. 465 (1878).

<sup>178.</sup> Great Atl. & Pac. Tea Co. v. Cottrell, 424 U.S. 366, 370 (1976)(quoting McLeod v. J.E. Dilworth Co., 322 U.S. 327, 330 (1944)).

<sup>179.</sup> National Bellas Hess, Inc. v. Illinois, 386 U.S. 753, 760 (1967).

<sup>180.</sup> United States v. South-Eastern Underwriters Ass'n, 322 U.S. 533, 552 (1944).

<sup>181.</sup> Great Atl. & Pac. Tea Co. v. Cottrell, 424 U.S. 366, 381 (1976)(quoting Baldwin v. G.A.F. Seelig, Inc., 294 U.S. 511, 522 (1935)).

give the federal government general police powers over public health and safety. While the federal government may regulate interstate commerce in a manner that protects public health and safety, it does not follow that the commerce clause confers general police powers upon the federal government. Since the federal government has no general police powers over health and safety, its authority to regulate radiation hazards and nuclear waste under the commerce power is limited.

Congress clearly has authority under the commerce clause to regulate radiation hazards associated with the operation of commercial nuclear power plants. 182 Furthermore, Congress undeniably has authority to regulate the interstate shipment of radioactive materials, including nuclear waste. Under the Shreveport doctrine, Congress constitutionally may regulate radiation hazards whenever necessary to preserve and protect interstate commerce and its instrumentalities. Radioactive waste does not always move in interstate commerce, however, and its handling does not invariably have a "close and substantial relation" to such commerce. Even when nuclear waste is transported across state lines or shipped by interstate carriers, the connection between the waste and interstate commerce comes to an end with the terminal storage or disposal of the waste. To say that once anything has moved in interstate commerce or has crossed state lines, it always may be regulated under the commerce clause regardless of its lack of an effect upon interstate commerce is to render meaningless the distinction between interstate and intrastate commerce.183 Such an overly expansive interpretation of the commerce clause totally ignores the tenth amendment and supports the distorted proposition that the powers not forbidden the United States nor expressly reserved to the states may be exercised by the federal government. Such a proposition is contrary to the explicit language of the tenth amendment and

<sup>182.</sup> See text accompanying notes 171-73 supra.

<sup>183.</sup> Kansas City Structural Steel Co. v. Arkansas, 269 U.S. 148 (1925); Browning v. Waycross, 233 U.S. 16 (1914). See Parker Corp. v. Utah, 285 U.S. 105, 111-12 (1935) (The extra-state origin of an item does not cloak it with permanent immunity from the exercise of state regulatory power.). Cf. NLRB v. Jones & Laughlin Steel Corp., 301 U.S. 1, 40-41 (1937) (Certain local incidents of commerce may have such a remote effect upon interstate commerce that federal regulation thereof would be "inconsistent with the maintenance of our federal system."). But see Katzenbach v. McClung, 379 U.S. 294 (1964).

makes a mockery of federalism and the doctrine of enumerated powers. This interpretation would elevate impermissibly the commerce clause to a unique position in the Constitution.<sup>184</sup> In short, the commerce clause constitutionally cannot provide the federal government with the authority to regulate radiation hazards and nuclear waste under all circumstances.

#### G. Promotion of the General Welfare

Notwithstanding congressional declarations that the Atomic Energy Act was enacted, at least in part, to promote the general welfare, songressional concern for the general welfare is not a constitutional basis for federal law. Apart from those powers delegated to it by the Constitution, Congress has no general authority to enact laws to promote the general welfare. The preamble of the Constitution, which speaks of "promot[ing] the general welfare," is not a source of substantive federal power and cannot authorize the exercise of power by the federal government that is not explicitly or implicitly derived from an express delegation of power. Promotion of the general welfare cannot support the exercise of federal power over radiation hazards or radioactive waste.

<sup>184.</sup> See Hostetter v. Idlewild Liquor Corp., 377 U.S. 324, 332 (1964), quoted with approval in, California Retail Liquor Dealers Ass'n v. Midcal Aluminum, Inc., 445 U.S. 97, 109 (1980) (Each provision of the Constitution "must be considered in the light of the other[s], and in the context of the issues and interests at stake in any concrete case."); Ullman v. United States, 350 U.S. 422, 428-29 (1956) ("As no constitutional guarantee enjoys preference, so none should suffer subordination or deletion. . . . [One should appeal] to the whole Constitution, not to a mutilating section of those parts only which for the moment find favor."); Knox v. Lee (Legal Tender Cases), 79 U.S. (12 Wall.) 457, 532 (1871) ("[T]he powers conferred upon Congress must be regarded as related to each other, and all means for a common end. Each is but part of a system, a constituent of one whole. No single power is the ultimate end for which the Constitution was adopted.").

<sup>185. 42</sup> U.S.C. §§ 2011, 2012g, 2012i, 2013 (1976).

<sup>186.</sup> Carter v. Carter Coal Co., 298 U.S. 238, 291-92 (1936).

<sup>187.</sup> Compare Jacobson v. Massachusetts, 197 U.S. 11, 22 (1905), with "[t]he Congress shall have Power... to pay the Debts and provide for the common Defense and general Welfare of the United States." U.S. Const. art. I, § 8, cl. 1. The power of Congress to authorize the expenditure of federal funds for the general welfare is not restricted by the enumeration of federal powers in the Constitution. Steward Machine Co. v. Davis, 301 U.S. 548 (1937); United States v. Butler, 297 U.S. 1 (1936). The power to spend federal funds for the general welfare, however, cannot be construed as a roving commission for Congress to enact laws for the general welfare.

### H. Protection of the General Public

This purported basis of federal power to regulate radiation hazards is a variant of the concept of promotion of the general welfare. Even proponents of the view that Congress may preempt the states from regulating nuclear power plants concede that "[t]here is, of course, no general federal police power 'to protect the health and safety of the public.' "188 This concession is not surprising because, under the Constitution, those powers not delegated to the federal government are retained by the states or the people. Because it was not delegated to the federal government in the Constitution, the power to protect public health and safety has always belonged to the states. Thus, legislation concerning the public health and safety traditionally has been a matter for the states. 191

Unless derived from or incidental to the exercise of some enumerated power in the Constitution, federal regulation of radiation hazards and nuclear waste cannot be based merely upon a congressional desire to protect the general public. However beneficient its intentions and however laudable its desire to protect the public, Congress cannot exercise a general police power not granted to it by the Constitution.<sup>192</sup>

### V. STATE EFFORTS TO REGULATE NUCLEAR WASTE

State legislation dealing with radioactive waste can be grouped into two categories, legislation enacted by states that have entered into a turnover agreement with the NRC pursuant to section 274 of the Atomic Energy Act and legislation enacted by nonagreement states. The former generally pose no preemp-

<sup>188.</sup> Murphy & La Pierre, supra note 1, at 435.

<sup>189.</sup> U.S. Const. amend. X. See, e.g., Kilbourn v. Thompson, 103 U.S. 168, 182 (1881); Sturges v. Crowinshield, 17 U.S. (4 Wheat.) 122, 193 (1819); Martin v. Hunter's Lessee, 14 U.S. (1 Wheat.) 304, 325 (1816).

<sup>190.</sup> House v. Mayes, 219 U.S. 270, 282 (1911); Arkansas v. Kansas & Tex. Coal Co., 183 U.S. 185, 189 (1901). See Hamilton v. Kentucky Distilleries Co., 251 U.S. 146, 156 (1919) (The federal government cannot exercise a general police power since the tenth amendment reserved that power to the states.).

<sup>191.</sup> Mackey v. Montrym, 443 U.S. 1 (1979); California v. LaRue, 409 U.S. 109, 114 (1972); Barksy v. Board of Regents, 347 U.S. 442, 449 (1954); Jacobson v. Massachusetts, 197 U.S. 11, 25 (1905); Hawker v. New York, 170 U.S. 189, 192-93 (1898).

<sup>192.</sup> See Carter v. Carter Coal Co., 298 U.S. 238, 291 (1936)("[B]eneficient aims, however great or well directed, can never serve in lieu of constitutional power.").

tion problems since they are premised on a delegation of authority over radiation hazards to the agreement state by the federal government. 193 The latter pose potential preemption problems since they are premised on an assertion of inherent state power and frequently ignore federal regulation of nuclear waste. Irrespective of whether the enacting state is an agreement state. state legislation dealing with radioactive waste can be grouped into the following six categories: 194 (1) prohibiting the disposal within the state of any out-of-state radioactive waste, (2) prohibiting any nuclear waste facilities within the state, (3) requiring legislative or other state approval before nuclear waste repositories can be built in the state, (4) regulating radioactive waste sites, (5) regulating the manner in which radioactive waste is transported within or through the state, and (6) regulating or affecting nuclear waste disposal in some other manner. Each type of legislation will be discussed in turn, and an assessment of the vulnerability of such legislation to preemption challenges will be made.195

## A. Prohibiting Disposal of Out-of-State Radioactive Wastes

Seven states have statutory provisions barring the disposal, within their borders, of spent nuclear fuel or nuclear waste originating in other states. Arizona, Delaware, Louisiana, Montana, and New Hampshire have enacted total bans on the disposal within their borders of out-of-state nuclear waste, and

<sup>193.</sup> For a list of the twenty-six agreement states, see note 29 supra. To the extent an agreement state enacts legislation which is inconsistent with, or directly challenges, federal authority over radioactive waste, a preemption problem arises.

<sup>194.</sup> To facilitate this discussion, the different types of state laws will be discussed separately even though the categories are not mutually exclusive.

<sup>195.</sup> Until state laws actually are invoked to regulate the handling and disposal of radioactive waste, any attempt at preemption analysis will be a mere exercise in speculation. As pointed out earlier, the courts will not seek out conflicts between state and federal laws. Indeed, there is a judicial preference to reconcile the operation of federal and state regulatory schemes whenever possible. See text accompanying notes 72-75, 78 supra. Accordingly, without an actual case or controversy, the courts will be unable to determine how states construe and apply their laws concerning radioactive waste and whether state laws concerning such waste actually conflict with applicable federal laws. Therefore, the author can offer only general comments on whether state laws in the area are likely to survive a legal challenge on preemption grounds.

<sup>196.</sup> Ariz. Rev. Stat. Ann. § 30-691 (Supp. 1980-81); Del. Code Ann. tit. 16, § 7418 (Supp. 1980); La. Rev. Stat. Ann. § 30:1111(D) (West Supp. 1980); Mont. Rev. Code Ann. § 75-3-302 (1979); N.H. Rev. Stat. Ann. 125:77-b (Supp. 1979).

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Minnesota and North Dakota permit the disposal of radioactive waste from other states only if the legislature gives its approval.<sup>197</sup>

With the possible exception of Montana, 198 none of these states has indicated that their legislation does not apply to the disposal of out-of-state waste by the NRC or other federal agencies. These statutes pose an implicit challenge to federal authority in the area of nuclear waste disposal. Any effort to apply these statutes to radioactive waste generated by or in the possession of the federal government is likely to be struck down as violative of the doctrine of intergovernmental immunities and the property clause. 199 Even if these statutes expressly exempted the NRC and other federal agencies from their prohibition, they probably would be struck down as unconstitutional. Considering the prevailing view that the federal government has the constitutional authority to regulate radiation hazards and given the pervasive nature of the federal regulatory scheme in the atomic energy field, any attempt by a state to prohibit the disposal within its borders of nuclear waste generated in another state is likely to be struck down on preemption grounds as inconsistent with the federal regulatory scheme.200 Alternatively, the application of such statutory prohibitions to the activities of NRC licensees probably would be held to violate the doctrine of intergovernmental immunities.201

Statutory prohibitions against out-of-state radioactive waste also will be susceptible to challenge under the commerce clause. In City of Philadelphia v. New Jersey,<sup>202</sup> the Supreme Court held that the state of New Jersey could not prohibit the importation of solid and liquid wastes for burial in landfills located

<sup>197.</sup> Minn. Stat. Ann. § 116C.73 (West Supp. 1980); N.D. Cent. Code § 23-20.2-09 (Supp. 1979). The Minnesota statute permits the transportation of radioactive waste into the state without legislative approval "for temporary storage in accordance with applicable federal and state law for up to 12 months pending transportation out of the state." Minn. Stat. Ann. § 116C.73 (West Supp. 1980).

<sup>198.</sup> Mont. Rev. Code Ann. § 75-3-302(2) (1979). This statute indicates that by-product material "licensed by the United States Nuclear Regulatory Commission shall be excepted from this part during the period of possession, use, and transportation prior to disposal." Id. (emphasis added).

<sup>199.</sup> See text accompanying notes 124-26, 128-32 supra.

<sup>200.</sup> See text accompanying notes 70, 71, 75-77 supra.

<sup>201.</sup> See text accompanying note 132 supra.

<sup>202. 437</sup> U.S. 617 (1978).

within its borders. The Court held New Jersey's statutory prohibition unconstitutional as an undue burden on interstate commerce. Although the New Jersey statute did not deal with radioactive waste, the Court's reasoning in striking down the statute can be applied to state statutes prohibiting the disposal of out-of-state nuclear waste. Unless the Supreme Court overturns the City of Philadelphia decision or reassesses its reasoning, state efforts to prohibit or restrict the disposal within their borders of out-of state radioactive wastes will fail.

### B. Prohibiting Nuclear Waste Facilities in the State

Louisiana, Maryland, Michigan, and Oregon prohibit any permanent storage or disposal of radioactive waste within their borders.<sup>204</sup> The Maryland and Oregon prohibitions appear to be absolute. Oregon's statutory scheme contains an apparent contradiction. Section 469.375<sup>205</sup> describes the circumstances under which the State Energy Facility Siting Council can issue a site certificate for a waste disposal facility within the state. Implicitly, this provisio allows the siting of a waste disposal facility in Oregon under certain conditions subject to state approval. In contrast, Section 469.525206 appears to place a total ban on waste disposal facilities in Oregon. A subsection of that statute provides: "Notwithstanding any other provision of this chapter, no waste disposal facility for any radioactive waste shall be established, operated or licensed within this state."207 Louisiana prohibits both temporary storage and permanent disposal of radioactive waste in any salt dome located within its borders.208 The Louisiana law expressly states that its prohibition applies to

<sup>203.</sup> For more detailed discussion of the case, see Dister & Schlesinger, State Waste Embargoes Violate the Commerce Clause: City of Philadelphia v. New Jersey, 8 Ecology L.Q. 371 (1979); Jaksetic, supra note 2, at 399-401.

<sup>204.</sup> La. Rev. Stat. Ann. § 30:1115 (West Supp. 1980); Md. Ann. Code art. 43, § 689B (Supp. 1980); Mich. Comp. Laws Ann. § 325.491 (Supp. 1980-81); Or. Rev. Stat. § 469.525 (1979).

<sup>205.</sup> OR. REV. STAT. § 469.375 (1979).

<sup>206.</sup> OR. REV. STAT. § 469.525 (1979). The Oregon Court of Appeals has held that the Oregon Energy Facility Siting Council need not find, as a matter of law, that the onsite storage of spent fuel at a nuclear power plant in excess of the amount authorized in the site certificate of the power plant violates section 469.525. Wyers v. Dressler, 42 Or. App. 799, 601 P.2d 1268, 1272-73 (1979).

<sup>207.</sup> Or. Rev. Stat. § 469.525(1) (1979).

<sup>208.</sup> La. Rev. Stat. Ann. § 30:1115(B) (West Supp. 1980).

"any activity which is regulated by the United States government or which is otherwise subject to federal law." The Michigan statute provides for the following exceptions to its prohibition of nuclear waste disposal: (1) on-site surface storage or disposal of spent nuclear fuel generated by an educational institution or commercial nuclear power plant located in the state; (2) disposal of uranium mill tailings produced within the state; (3) temporary storage of radioactive waste enroute to final disposal sites; (4) storage of radioactive materials used in medical treatment or research; and (5) storage of radioactive waste stored in the state prior to January 1, 1970. 210

Any attempt by Louisiana, Maryland, Michigan, or Oregon to enforce their statutes against the federal government or its agents in an effort to prevent the establishment of repositories for radioactive waste in the possession of the federal government is likely to be struck down as violative of the doctrine of intergovernmental immunities and the property clause.<sup>211</sup> Even if limited to nuclear waste disposal activities of nongovernmental entities, these statutes would be subject to a challenge under the commerce clause rationale of City of Philadelphia v. New Jersey.<sup>212</sup>

In City of Philadelphia, the Supreme Court indicated that hazardous waste material was an article of commerce within the scope of the commerce clause and that the states could not prohibit the transportation of such wastes across state lines unless the dangers from their movement far outweighed the worth of the waste in interstate commerce. To the extent that nuclear waste material is deemed to be an article of interstate commerce, the power of states to restrict its movement into their territories, is circumscribed similarly. Yet, the rationale of City of Philadelphia may not control the validity of these statutes. The Court in City of Philadelphia held that, because the New Jersey statute imposed a prohibition only upon wastes coming from outside the state and did not affect wastes originating within the state, it violated the principle of nondiscrimination

<sup>209.</sup> La. Rev. Stat. Ann. § 30:1116 (West Supp. 1980).

<sup>210.</sup> Mich. Comp. Laws Ann. § 325.491 (Supp. 1980-81).

<sup>211.</sup> See text accompanying notes 124-26, 128-32 supra.

<sup>212. 437</sup> U.S. 617 (1978).

<sup>213.</sup> Id. at 622-24.

inherent in the commerce clause.<sup>214</sup> Because the statutes enacted by Louisiana, Maryland, Michigan, and Oregon affect all wastes, regardless of their territorial origin, the rationale of *City of Philadelphia* would not necessarily render them unconstitutional under the commerce clause.

Assuming, arguendo, that the statutes of Louisiana, Maryland, Michigan, and Oregon do not violate the doctrine of intergovernmental immunities or the commerce clause, they yet may be subject to challenge under the preemption doctrine. The pervasive federal regulatory scheme governing nuclear power in the United States implies that Congress intended to preempt state regulation in this area.<sup>215</sup> Alternatively, the statutes may be struck down as obstacles to the congressional policy of encouraging the development of commercial nuclear power within the framework of federal regulation.<sup>216</sup>

Alabama, Maine, and Michigan have taken a novel approach in their effort to preclude the disposal of nuclear waste within their borders. Although these statutes differ, each seems to be premised on the ability of states to qualify or withhold their consent to the cession of jurisdiction over land obtained from them by the United States by purchase or condemnation.<sup>217</sup> If the federal government wishes to locate a nuclear

<sup>214.</sup> Id. at 626-28.

<sup>215.</sup> See text accompanying notes 4-65.

<sup>216.</sup> See Pacific Legal Foundation v. State Energy Resources Conservation & Dev. Comm'n, 472 F. Supp. 191 (S.D. Cal. 1979) (California statute prohibiting certification of new nuclear power plants until state commission determines that the federal government has approved a technology for the disposal of high-level radioactive waste is unconstitutional as an obstacle to the accomplishment of the congressional policy of encouraging and fostering commercial nuclear power in the United States.). See also text accompanying notes 70, 71, 75-77 supra.

<sup>217.</sup> Notwithstanding any law, order or regulation to the contrary, the state of Alabama does not consent to the acquisition by any agency, department or instrumentality of the United States of America by purchase, condemnation or otherwise of any land, building or other site within the state of Alabama for use of storing, depositing or dumping any nuclear spent fuel or any other radioactive material or waste, except for that nuclear spent fuel or radioactive material or waste that is generated in Alabama.

ALA. CODE § 22-14-16 (Supp. 1980).

Notwithstanding any other provision of this chapter, this State does not consent to the acquisition by the United States Government, by purchase, condemnation, lease, easement or by any other means of any land, building or other structure, above or below ground, in or under the waters of the State for use in storing, depositing or treating radioactive waste materials, except by

waste repository on nonfederal land, and the state in which the land is located opposes the siting of the waste repository, it becomes necessary to consider the following interrelated issues: (1) the ability of the United States to exercise a power of eminent domain to seize land; (2) the scope of article I, section 8, clause 17 of the Constitution; (3) the scope of federal power under the property clause; and (4) the doctrine of intergovernmental immunities.

1. Eminent domain.—It is well established that the United States has the power to exercise the right of eminent domain "so far as is necessary to the enjoyment of the powers conferred upon it by the Constitution."218 This power is "complete in itself. It can neither be enlarged nor diminished by a State. Nor can any State prescribe the manner in which it must be exercised. The consent of a State can never be a condition precedent to its enjoyment."219 If the exercise of the right of eminent domain falls within the scope of Congress' constitutional authority. no state may seek to participate in the decision concerning the exercise of that power. Given the prevailing view that Congress has the constitutional authority to regulate radiation hazards, it is unlikely that a state could convince a federal court that the federal government cannot exercise its right of eminent domain to obtain land for a nuclear waste repository. However, if a state were able to convince a federal court that Congress lacks the constitutional authority to regulate radiation hazards in a manner that wholly preempts state authority over radioactive

prior affirmative vote of the Legislature.

Me. Rev. Stat. Ann. tit. 1, § 15-A (Supp. 1980-81).

The consent of the state of Michigan is hereby given in accordance with clause 17 of section 8 of article 1 of the constitution of the United States, to the acquisition by the United States, by purchase, condemnation or otherwise, of any land in this state which has been, or may hereafter be acquired for forts, magazines, arsenals, dockyards, and other needful buildings. The state of Michigan does not give consent to the acquisition by the United States by purchase, condemnation, or otherwise of any land or building for use of storing, depositing, or dumping any radioactive material.

MICH. COMP. LAWS ANN. § 3.201 (Supp. 1980-81). "This state does not consent to the acquisition by the United States by purchase, condemnation, or otherwise of any land or building for use in storing, depositing, or dumping radioactive material" MICH. COMP. LAWS ANN. §§ 3.301(3), 3.321(2), 3.341(2) (Supp. 1980-81).

<sup>218.</sup> Kohl v. United States, 91 U.S. 367, 372 (1876).

<sup>219.</sup> Id. at 374; United States v. Carmack, 329 U.S. 230, 240 (1946).

waste,<sup>220</sup> it could argue that the exercise of eminent domain by the federal government for the purpose of obtaining land for a nuclear waste repository is not plenary. Because it is unlikely that the broad preemption view of *Northern States Power Co.* and its progeny will be discarded, however, any state effort to challenge the right of the federal government to obtain land by eminent domain for the purpose of building a radioactive waste repository probably will fail.

According to their language, the Alabama and Maine statutes constitute a direct attempt to limit the federal government in its exercise of eminent domain. Both statutes would be struck down summarily unless Alabama and Maine convinced a court that their legislatures only intended to withhold consent to the cession of jurisdiction over land obtained by the United States for the purpose of building nuclear waste repositories. Although Michigan's statute employs language similar to that found in the Alabama and Maine statutes it invokes the states' prerogative under article I, section 8, clause 17 of the Constitution to reserve jurisdiction over land acquired by the United States and does not purport to challenge the federal government's eminent domain power. The Michigan statute could be defended on this ground, thus reducing the chance that it will be invalidated summarily.

2. Article I, Section 8, Clause 17.—This little known clause of the Constitution gives Congress the power "[t]o exercise exclusive Legislation in all Cases whatsoever, over . . . Places purchased by the Consent of the Legislature of the State in which the Same shall be, for the Erection of Forts, Magazines, Arsenals, dock-Yards and other needful Buildings."<sup>221</sup> This clause has been construed to cover all structures necessary for carrying out the business or duties of the federal government, including post offices and locks and dams to improve navigation, but not lands acquired for flood control, forests, parks, or wildlife sanctuaries.<sup>222</sup> The Supreme Court also has held that a state may

<sup>220.</sup> See text accompanying notes 108-92 supra.

<sup>221. &</sup>quot;Exclusive legislation" has been construed to mean "exclusive jurisdiction." See, e.g., Surplus Trading Co. v. Cook, 281 U.S. 647, 652 (1930). Furthermore, federal power under article I, section 8, clause 17 is plenary and includes the exercise of policy powers not otherwise found in the powers of Congress enumerated in the Constitution. See Palmore v. United States, 411 U.S. 389, 397-98 (1973).

<sup>222.</sup> James v. Dravo Contracting Co., 302 U.S. 134, 143 (1937); Battle v. United

convey or cede jurisdiction over land within its borders to the federal government for purposes other than those enumerated in clause 17.<sup>223</sup> Because land acquired by the federal government through the exercise of its eminent domain power or given to it by a state without charge is deemed to be "purchased" within the meaning of clause 17,<sup>224</sup> the extent of federal jurisdiction over such land, however obtained, is determined by clause 17.

A long line of cases has upheld the right of a state to qualify its consent by ceding less than full and exclusive jurisdiction to the United States.<sup>225</sup> In the absence of consent or cession of full jurisdiction by the state, federal jurisdiction over the land obtained by the United States would not be exclusive.<sup>226</sup> Even when the state withholds its consent, however, the instrumentalities of the federal government built upon the land

will be free from any such interference and jurisdiction of the State as would destroy or impair their effective use for the purposes designed. Such is the law with reference to all instrumentalities created by the general government... Their exemption from state control is essential to the independence and sovereign authority of the United States within the sphere of their delegated powers. But, when not used as such instrumentalities, the legislative power of the State over the places acquired will be as full and complete as over any other places within her limits.<sup>227</sup>

States, 209 U.S. 36 (1908).

<sup>223.</sup> Collins v. Yosemite Park & Curry Co., 304 U.S. 518, 528 (1938).

<sup>224.</sup> United States v. State Tax Comm'n, 412 U.S. 363, 372 n.14 (1973); Humble Pipe Line Co. v. Waggonner, 376 U.S. 369, 372 (1964).

<sup>225.</sup> E.g., Paul v. United States, 371 U.S. 245, 264-65 (1963); James Stewart & Co. v. Sadrakula, 309 U.S. 94, 99-100 (1940); Collins v. Yosemite Park & Curry Co., 304 U.S. 518, 528-30 (1938); James v. Dravo Contracting Co., 302 U.S. 134, 147-49 (1937); Silas Mason Co. v. Tax Comm'n, 302 U.S. 186, 203-04 (1937); Surplus Trading Co. v. Cook, 281 U.S. 647, 650-52 (1930); Palmer v. Barrett, 162 U.S. 399, 403-04 (1895). If a state wishes to withhold, condition, or qualify its consent to a cession of jurisdiction to the United States, it must do so explicitly. United States v. Lewisburg Area School Dist., 539 F.2d 301, 308 (3d Cir. 1976).

<sup>226.</sup> Silas Mason Co. v. Tax Comm'n, 302 U.S. 186, 197 (1937). See Paul v. United States, 371 U.S. 245, 264 (1963) (Without a cession of jurisdiction by the state, "the United States does not obtain the benefits of art. 1, § 8, cl. 17, its possession being simply that of an ordinary proprietor.").

<sup>227.</sup> Fort Leavenworth R.R. v. Lowe, 114 U.S. 525, 539 (1885). Accord, James Stewart & Co. v. Sadrakula, 309 U.S. 94, 103-04 (1937). See United States v. State Tax Comm'n, 412 U.S. 363, 379-80 (1973) (When the United States has not acquired exclusive jurisdiction over a federal enclave, a state may exercise concurrent jurisdiction over the

When the state does not condition or qualify its cession of jurisdiction, the power of Congress to exercise exclusive jurisdiction under clause 17 may be implied,<sup>228</sup> and such exclusive jurisdiction may be exercised by Congress in a plenary fashion.<sup>229</sup> Nevertheless, when the United States has possession of land within a state and the land is not being used for purposes within the scope of powers granted to the United States under the Constitution, the United States has "only the rights of an ordinary proprietor."<sup>230</sup> The land is then subject to the authority and control of the state.<sup>231</sup> A state cannot recapture jurisdiction over land once it is ceded to the United States, but the state can regain jurisdiction over land conditionally ceded to the federal government upon the termination of the condition.<sup>232</sup>

The constitutional question posed by the efforts of Alabama, Maine, and Michigan to resist the siting of nuclear waste repositories within their borders implicates both the United States' power of eminent domain and the states' prerogative to reserve jurisdiction over land "purchased" by the United States.

land so long as it does not attempt to regulate instrumentalities of the federal government.); Howard v. Comm'rs of Sinking Fund, 344 U.S. 624, 627 (1953)(A state may exercise its power over a federal enclave within its borders "so long as there is no interference with the jurisdiction asserted by the Federal Government."); United States v. Holmes, 414 F. Supp. 831, 836 (D. Md. 1976)(Federal jurisdiction over lands ceded to the United States "will extend, unless expressly or by clear implication excluded by the Constitution or an Act of Congress, to include those matters and things reasonably necessary for the enjoyment of the sovereign powers granted the United States or for the fulfillment of the functions and duties entrusted to it.").

228. United States v. Sharpnack, 355 U.S. 286, 288 (1958). It is worth noting that there is a statutory presumption that the United States has not accepted jurisdiction over lands obtained by it "unless and until the United States has accepted jurisdiction" over such lands as provided by federal law. See 40 U.S.C. § 255 (1976).

229. Palmore v. United States, 411 U.S. 389, 397-98 (1973). The extent of federal jurisdiction over lands obtained by the United States is a federal question. Paul v. United States, 371 U.S. 245, 267 (1963).

230. Fort Leavenworth R.R. v. Lowe, 114 U.S. 525, 530-31 (1885).

231. Id. at 531. But see United States v. Unzeuta, 281 U.S. 138, 144-45 (1930) (mere fact that part of federal military reservation is used as a railroad right of way is not inconsistent with exclusive jurisdiction ceded to United States); Benson v. United States, 146 U.S. 325, 331 (1892) (When a portion of a federal military reservation is devoted to farming purposes, the courts will not find that such a limited, temporary use for nonmilitary purposes divests the United States of its exclusive jurisdiction over the land used for farming.).

232. United States v. Heard, 270 F. Supp. 198, 200-01 (W.D. Mo. 1967). See United States v. Unzeuta, 281 U.S. 138, 143 (1930)(state could qualify its cession of jurisdiction on condition that jurisdiction ceded to United States would "continue no longer than the United States shall own and occupy the reservation").

Considering the plenary nature of the federal government's power of eminent domain, these states constitutionally cannot resist or "veto" the taking of land by the United States for the purpose of carrying out its governmental business. However, these states could question whether the siting, construction, and operation of nuclear waste repositories by the federal government is within the scope of congressional authority under the Constitution. If such a use is outside the scope of congressional authority,233 the United States would have "only the rights of an ordinary proprietor" and the land upon which the repository was established would be subject to state law.234 Therefore. under their broad police powers, the states could regulate the public health and safety aspects of nuclear waste repositories within their borders. Alternatively, the states might argue that they are entitled to qualify or condition their consent or cession of iurisdiction under article I, section 8, clause 17 of the Constitution and reserve the right to exercise jurisdiction for public health and safety purposes over land obtained by the United States to establish a nuclear waste repository.

Despite their plausibility, these arguments are unlikely to be accepted by a federal court. The prevailing view holds that Congress has the constitutional authority to regulate radiation hazards and preempt state regulation thereof.235 In accordance with this view, the courts are likely to hold that the establishment of a nuclear waste repository by the United States is within the scope of its constitutional authority. To the extent that the regulation of radiation hazards, including the management of radioactive waste, is deemed to be within the scope of congressional power under the Constitution, any reservation of state jurisdiction under article I, section 8, clause 17 must not interfere with the operation of a nuclear waste repository by the federal government.236 Even if it were within the states' prerogative to reserve jurisdiction over the sites of nuclear waste repositories by virtue of article I, section 8, clause 17, such state jurisdiction could not be exercised in a manner that amounts to a

<sup>233.</sup> See text accompanying notes 108-92 supra.

<sup>234.</sup> See text accompanying notes 230-31 supra.

<sup>235.</sup> See text accompanying notes 108-12 supra.

<sup>236.</sup> See notes 128-35 and accompanying text supra.

regulation of instrumentalities of the federal government.237 Even under an expansive interpretation of a state's right to condition or qualify its consent under article I, section 8, clause 17, any reservation of state jurisdiction must be prospective in nature and must reserve jurisdiction specifically related to nuclear waste management. Any land already ceded without qualification to the United States or ceded with reservations of jurisdiction unrelated to the regulation of radioactive waste disposal would be immune from state laws purporting to regulate radioactive waste.288 For example, a cession of land by a state with a reservation of jurisdiction to serve civil and criminal process on the land obtained by the United States would be wholly ineffective to sustain state efforts to enforce a statute regulating nuclear waste. In light of the foregoing principles, Alabama, Maine, and Michigan cannot withhold, qualify, or otherwise condition their cession of jurisdiction over lands already ceded to the United States.

- 3. The Property Clause.<sup>239</sup>—Once land becomes the property of the United States, it is necessary to consider the applicability of the property clause to that land. A serious question arises concerning the relationship between the scope of federal jurisdiction under article I, section 8, clause 17 and the scope of congressional power under the property clause. In Kleppe v. New Mexico,<sup>240</sup> the Supreme Court gave an expansive interpretation to the scope of congressional authority under the property clause:
  - ... [A]nd while the furthest reaches of the power granted by the Property Clause have not yet been definitively resolved, we have repeatedly observed that "[t]he power over the public land thus entrusted to the Congress is without limitations."
    - . . . And even over public lands within the States, "[t]he

<sup>237.</sup> See notes 128-35 and accompanying text supra.

<sup>238.</sup> United States v. Heard, 270 F. Supp. 198, 200-01 (W.D. Mo. 1967)(A state cannot recapture jurisdiction over land once it has been ceded to the United States.). Cf. United States v. Little Lake Misere Land Co., 412 U.S. 580 (1973); Paul v. United States, 371 U.S. 245, 268 (1963); Murray v. Joe Gerrick Co., 291 U.S. 315, 318 (1934)(state laws enacted subsequent to cession of exclusive jurisdiction to United States cannot be enforced within federal enclave).

<sup>239.</sup> U.S. CONST. art. IV, § 3, cl. 2. It reads as follows: "The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States . . . ." Id.

<sup>240. 426</sup> U.S. 529 (1976).

general Government doubtless has a power over its own property analogous to the police power of the several States, and the extent to which it may go in the exercise of such power is measured by the exigencies of the particular case."... Although the Property Clause does not authorize "an exercise of a general control over public policy in a State," it does permit "an exercise of the complete power which Congress has over particular public property entrusted to it."<sup>241</sup>

These statements indicate that Congress may exercise plenary authority over property or territory belonging to the United States. When the United States has exclusive jurisdiction over land under article I, section 8, clause 17 of the Constitution, it seems simple enough to conclude that the broad sweep of the property clause precludes any state efforts to regulate the manner in which the federal government uses or disposes of the property.

A serious question is presented when the state has reserved some form of jurisdiction over land under clause 17. In this situation, the *Kleppe* opinion poses a serious dilemma for anyone seeking to reconcile article I, section 8, clause 17 and the property clause. In *Kleppe*, the Court stated:

[W]hile Congress can acquire exclusive or partial jurisdiction over lands within a State by the State's consent or cession, the presence or absence of such jurisdiction has nothing to do with Congress' powers under the Property Clause. Absent consent or cession a State undoubtedly retains jurisdiction over federal lands within its territory, but Congress equally surely retains the power to enact legislation respecting those lands pursuant to the Property Clause . . . . And when Congress so acts, the federal legislation necessarily overrides conflicting state laws under the Supremacy Clause. 242

Although unobjectionable on its face, this language poses serious problems. What purpose does it serve a state to qualify its cession of jurisdiction under article I, section 8, clause 17, if

<sup>241.</sup> Id. at 539-40 (quoting United States v. San Francisco, 310 U.S. 16, 29 (1940); Camfield v. United States, 167 U.S. 518, 525 (1897).

<sup>242.</sup> Id. at 542-43. But see United States v. Sharpnack, 355 U.S. 286, 288 (1958)("In the absence of restriction in the cessions of the respective enclaves to the United States, the power of Congress to exercise legislative jurisdiction over them is clearly stated in Article I, section 8, cl. 17 and Article IV, section 3, cl. 2, of the Constitution." (emphasis added)).

Congress can exercise its plenary power under the property clause to pass legislation requiring state law to yield under the supremacy clause? The strong language of Kleppe threatens to negate article I, section 8, clause 17 by subordinating it to the property clause. Such a result is contrary to established principles of constitutional construction. Separate parts of the Constitution should be construed, whenever possible, as compatible with each other. As pointed out by Chief Justice Marshall in Marbury v. Madison,<sup>248</sup> "[i]t cannot be presumed that any clause in the constitution is intended to be without effect; and therefore such a construction is inadmissible, unless the words require it."244 Furthermore, in the absence of clear constitutional authority, it seems undesirable to fashion an arbitrary, ad hoc hierarchy of constitutional values by which certain parts of the Constitution are elevated to a higher status than other parts.<sup>245</sup> The Constitution is the fundamental law of the land, and it seems to be of dubious propriety for the courts to treat one part of this fundamental law as "more fundamental" than another part.246

The following theory is offered to reconcile article I, section

<sup>243. 5</sup> U.S. (1 Cranch) 137 (1803).

<sup>244.</sup> Id. at 174. See Richfield Oil Corp. v. State Bd. of Equalization, 329 U.S. 69, 77-78 (1946); United States v. Butler, 297 U.S. 1, 65 (1936); Blake v. McClung, 172 U.S. 239, 260-61 (1898).

<sup>245.</sup> See Hostetter v. Idlewild Liquor Corp., 377 U.S. 324, 332 (1964), quoted with approval in, California Retail Liquor Dealers Ass'n v. Midcal Aluminum, Inc., 445 U.S. 97, 109 (1980) (Provisions of the Constitution "must be considered in the light of the other, and in the context of the issues and interests at stake in any concrete case."); Exparte Young, 209 U.S. 123, 149-50 (1908) (In a case implicating both the eleventh and fourteenth amendments, Justice Peckham wrote for the majority that "[w]e may assume that each exists in full force, and that we must give to the Eleventh Amendment all the effect it naturally would have, without cutting it down or rendering its meaning any more narrow than the language, fairly interpreted, would warrant.").

<sup>246.</sup> See Ullman v. United States, 350 U.S. 422, 428-29 (1956) ("As no constitutional guarantee enjoys preference, so none should suffer subordination or deletion . . . . [One should appeal] to the whole Constitution, not to a mutilating section of those parts only which for the moment find favor."); Knox v. Lee (Legal Tender Cases), 79 U.S. (12 Wall.) 457, 532 (1871) ("[T]he powers conferred upon Congress must be regarded as related to each other, and all means for a common end. Each is but part of a system, a constituent of one whole. No single power is the ultimate end for which the Constitution was adopted."). In Kleppe v. New Mexico, the Supreme Court appears to have elevated the property clause to a preferred position over article I, section 8, clause 17. 426 U.S. 529 (1976). Such a result is reminiscent of the classic statement in George Orwell's Animal Farm that all the animals in the farm were equal, but that some were "more equal" than others.

8, clause 17 and the property clause without sacrificing one for the sake of the other. The property clause applies when a state has unconditionally ceded exclusive jurisdiction over land that has been obtained by the United States through purchase or condemnation. When the state has refused to cede jurisdiction or has qualified its cession, Congress' plenary power under the property clause extends only to the extent that its jurisdiction is exclusive, that is, to those areas over which no state jurisdiction has been reserved. This theory is supported by cases holding that a qualified cession of jurisdiction under article I, section 8. clause 17, leaves the United States with something less than exclusive jurisdiction over the land obtained247 and those holding that the exclusive jurisdiction of the United States is suspended when the United States uses or permits the use of the land obtained under article I, section 8, clause 17 for nonpublic purposes.248 Thus, jurisdiction obtained by the United States under article I, section 8, clause 17 is less than plenary whenever validly qualified or conditioned by the state ceding jurisdiction to the United States. The alternative is to accept the Kleppe opinion at face value even though it throws into question a long line of precedent concerning constitutional interpretation construction.

Under this interpretation of article I, section 8, clause 17 and the property clause, whenever the United States obtains land through purchase or condemnation for the purpose of building and operating a nuclear waste repository, the state may qualify its cession of jurisdiction over the land under article I, section 8, clause 17. When such a qualified cession is made, the federal jurisdiction over the land is not exclusive, and, therefore, congressional authority under the property clause does not extend to those matters over which the state has reserved or quali-

<sup>247.</sup> United States v. Unzeuta, 281 U.S. 138, 142 (1930) (To the extent they were valid, the terms of a limited state cession of jurisdiction to the United States will determine the extent of federal jurisdiction.). Accord, James v. Dravo Contracting Co., 302 U.S. 134, 142 (1937).

<sup>248.</sup> S.R.A., Inc. v. Minnesota, 327 U.S. 558, 563-64 (1946); Fort Leavenworth R.R. v. Lowe, 114 U.S. 525, 542 (1885). See United States v. Goings, 504 F.2d 809 (8th Cir. 1974) (When the United States conveyed land to a private corporation, reserving only the right to occupy the land in case of a national emergency, the United States no longer held the property for the purpose and objects of article I, section 8, clause 17, and jurisdiction reverted to the state.).

fied its cession of jurisdiction (for example, public health and safety aspects of radioactive waste disposal). The supremacy clause is not applicable here since the qualification by the state of its cession of jurisdiction creates a narrow zone in which congressional power under the property clause is limited. Assuming that a state were to convince a court to accept this unusual theory, the state would still have other constitutional hurdles to overcome before it could succeed in its effort to regulate radioactive waste disposal sites. For example, a federal nuclear waste repository still might be exempt from state regulation by virtue of some specific power of Congress such as the commerce power, or the war powers, or the doctrine of intergovernmental immunities.

4. Intergovernmental Immunities.—Assuming that a state can reserve limited jurisdiction under article I, section 8, clause 17 over land obtained by the United States for the purpose of building a nuclear waste repository and that the property clause is construed as suggested in the previous section. Alabama, Maine, and Michigan still must overcome the obstacle of the doctrine of intergovernmental immunities. Under federal law, any high-level radioactive waste repository is to be controlled by the Department of Energy and licensed by the NRC.249 Therefore, any state regulation of such repositories would constitute regulation of instrumentalities of the United States. Since Congress did not manifest an intention to give states authority to regulate high-level radioactive waste repositories in either the Energy Reorganization Act of 1974<sup>250</sup> or the Department of Energy Organization Act,251 the doctrine of intergovernmental immunities would appear to bar states from regulating such repositories. Similarly, low-level radioactive waste disposal is licensed by the NRC or by states given authority to regulate low-level waste under a section 274 turnover agreement.252 Considering the general acceptance of the view that the federal government has the constitutional authority to regulate radiation hazards. any state efforts to regulate low-level radioactive waste disposal

<sup>249. 42</sup> U.S.C. §§ 5842, 7133(a)(8) (1976 & Supp. II 1978 & Supp. III 1979).

<sup>250.</sup> Id. §§ 5801-5891.

<sup>251.</sup> Id. §§ 7111-7352.

<sup>252. 10</sup> C.F.R. §§ 20.301-.305 (1980). See generally Green & Zell, supra note 3, at 15-16; Hansell, The Regulation of Low-Level Nuclear Waste, 15 Tulsa L.J. 249 (1979).

also would run afoul of the doctrine of intergovernmental immunities.

Unless Alabama, Maine, and Michigan can convince a court that the federal government lacks the constitutional authority to regulate radioactive waste disposal,<sup>253</sup> their statutes will not enable them to regulate nuclear waste even if the courts adopted an expansive view of a state's right to withhold, reserve, or qualify its cession of jurisdiction under article I, section 8, clause 17. These states might have a better chance of persuading a federal court to accept this argument for low-level nuclear waste than for high-level radioactive waste.<sup>254</sup>

# C. Requiring Legislative or Other State Approval of Nuclear Waste Facilities

Fifteen states prohibit the creation or establishment of nuclear waste facilities within their borders without prior state authorization. Connecticut, Minnesota, North Dakota, South Dakota, and Vermont require legislative approval before any radioactive waste may be buried permanently within their borders. Kentucky and New York prohibit the location of nuclear waste disposal facilities within their borders until the legislature and the governor approve the creation of such facilities. Alaska law requires approval by the legislature, the governor, and the local government with jurisdiction over the area of the proposed facility before the State Department of Environmental Conservation may issue a permit for the construction of a nuclear waste disposal facility. Before a radioactive waste disposal or storage facility can be built in New Hampshire, the State Task Force on Radioactive Waste Management must develop a

<sup>253.</sup> See text accompanying notes 133-35 supra.

<sup>254.</sup> See text accompanying notes 115-22, 166-84 supra.

<sup>255.</sup> Act of June 18, 1979, Pub. L. No. 79-488, 1979 Conn. Pub. Acts \_\_\_, reprinted in Conn. Gen. Stat. Ann. app., at 161 (West 1980); Minn. Stat. Ann. § 116C.72 (West Supp. 1980); N.D. Cent. Code § 23-20.2-09 (Supp. 1979); S.D. Codified Laws Ann. § 34-21-1.1 (The statute requires prior approval "by the Governor or upon his request the Legislature . . . ."); Vt. Stat. Ann. tit. 10, §§ 6501, 6503(c) (Supp. 1980).

<sup>256.</sup> KY. REV. STAT. § 211.852 (Supp. 1980); N.Y. PUB. AUTH. LAW § 1854-a.2 (Mc-Kinney Supp. 1970-80). Kentucky also requires state licensing and regulation of those nuclear waste disposal sites that are permitted. KY. REV. STAT. §§ 211.840-.898 (Supp. 1980).

<sup>257.</sup> Alaska Stat. § 18.45.025 (Supp. 1980).

proposal for consideration by the legislature. No storage or disposal facility can be established without final legislative ap-Mississippi requires gubernatorial approval. proval.258 favorable report from the State Department of Natural Resources, and final approval by the Division of Radiological Health of the State Board of Health before the long-term storage or permanent disposal of nuclear waste can be permitted in the state.259 Delaware, Georgia, Iowa, and Maine require approval by state agencies before radioactive waste can be stored or disposed of within their borders.260 The Maine statute exempts from its coverage the on-site storage of spent nuclear fuel elements at existing nuclear generating facilities provided the spent nuclear fuel was generated by the operation of a facility within the State.<sup>261</sup> New Mexico requires state approval prior to the creation of a nuclear waste disposal facility, but it is not clear how such state approval is to be manifested.262

The doctrine of intergovernmental immunities would preclude the application of these statutes to activities of the federal government or its agents. Whether these statutes could regulate the activities of private entities acting under federal licenses depends on whether the courts will continue to follow the prevailing view that the federal government has preempted the area of radiation hazards. To the extent that states can convince courts to reexamine the reasoning of Northern States Power Co. and its progeny, they have an outside chance of successfully defending these statutes from a preemption challenge. If the waste repositories in question are intended for the storage of radioactive

<sup>258.</sup> N.H. Rev. Stat. Ann. §§ 125:77-b to :77-f (Supp. 1979). The state Task Force on Radioactive Waste Management consists of the governor, the state commissioners of safety, of public works and highways, and of health and welfare, as well as one representative from each house of the state legislature. *Id.* § 125:77-e.

<sup>259.</sup> Miss. Code Ann. § 17-17-49 (Supp. 1980). Any storage or disposal of nuclear waste that is permitted must strictly comply with federal and state guidelines. *Id.* § 17-17-49(4).

<sup>260.</sup> Del. Code Ann. tit. 16, § 7417 (Supp. 1980); Ga. Code Ann. § 88-1306.1 (Supp. 1980); Iowa Code Ann. § 455B.88 (West Supp. 1980-81); Me. Rev. Stat. Ann. tit. 38, § 361-D (West Supp. 1980-81).

<sup>261.</sup> ME. REV. STAT. ANN. tit. 38, § 361-D.5 (West Supp. 1980-81).

<sup>262.</sup> N.M. Stat. Ann. § 74-4A-5 (1979). See generally id. §§ 74-4A-1 to -14 (1979). New Mexico explicitly excludes from the scope of its statute "weapons grade material, radioactive waste resulting from processing weapons grade material or other radioactive materials incidental to research which is under the exclusive control of the United States." Id. § 74-4A-4.C(5) (1979).

wastes generated by the military, the courts probably would hold that these statutes were preempted under the war powers clauses.

Because they are agreement states,<sup>263</sup> Georgia, Kentucky, Mississippi, New Hampshire, New York, New Mexico, and North Dakota may have a better chance of overcoming a preemption challenge to their statutes than do nonagreement states. To prevail, these agreement states must convince the courts that their statutes fall within the scope of authority delegated to them by the federal government under section 274 of the Atomic Energy Act.<sup>264</sup> Because the federal government has not yet adopted the view that states may veto the siting of nuclear waste facilities within their borders, it is doubtful that the delegation of authority under section 274 of the Atomic Energy Act provides the necessary basis for these types of statutes. These statutes will stand or fall on the basis of whether the states have the authority, independent of delegation under the Atomic Energy Act, to regulate nuclear waste.

### D. Regulating Radioactive Waste Disposal Sites

At least eight states have enacted legislation that directly regulates or affects the operation of radioactive waste disposal sites. Arizona, Florida, Washington, and Wyoming authorize state agencies to provide for the licensing or registration of nuclear waste disposal sites.<sup>265</sup> Arizona, Illinois, Virginia, and Washington require state acquisition of any land upon which radioactive waste has been permanently stored or disposed.<sup>266</sup> These statutes share the common purpose of seeking to ensure that disposal of radioactive waste is handled by an entity that is capable of providing continual custodial care of the long-lived waste. Arizona, Illinois, Louisiana, and Washington have enacted statutory schemes for establishing a perpetual care fund to en-

<sup>263.</sup> See note 29, supra.

<sup>264. 42</sup> U.S.C. § 2021 (1976 & Supp. II 1978). See text accompanying notes 28-34 supra.

<sup>265.</sup> Ariz. Rev. Stat. Ann. §§ 30-671 to -674 (West Supp. 1980-81); Fla. Stat. Ann. § 290.052(5) (Supp. 1979); Wash. Rev. Code Ann. §§ 70.98.080, 70.121.030 (1975 & Supp. 1980-81); Wyo. Stat. §§ 35-4-301, 302 (1977).

<sup>266.</sup> Ariz. Rev. Stat. Ann. § 30-692 (West Supp. 1980-81); Ill. Ann. Stat. ch. 111½, § 230.1 (Smith-Hurd 1977); Va. Code §§ 32.1-230(1), (3) (1979); Wash. Rev. Code Ann. §§ 43.31.300, 70.121.050-.080 (Supp. 1980-81).

sure that the costs and operating expenses of handling radioactive waste are available on a continuing basis.<sup>267</sup> Arizona, Georgia, Louisiana, and Washington require licensees authorized to possess or use radioactive materials to be solvent financially or otherwise provide some financial security or insurance to ensure the decommissioning and disposal of radioactive materials or nuclear wastes in their possession.<sup>267.1</sup>

As agreement states,<sup>268</sup> Arizona, Florida, Louisiana, and Washington have the best chance of persuading a court that their statutes are within the scope of the authority delegated to them by the federal government under section 274 of the Atomic Energy Act.<sup>269</sup> To the extent that the statutes of these states conflict with federal law, they do not fall within the scope of section 274 of the Atomic Energy Act<sup>270</sup> and will be subject to the same close scrutiny that courts will give the statutes of nonagreement states. Under the prevailing view that the federal government has preempted the field of radiation hazards, statutes concerning nuclear waste disposal enacted by nonagreement states probably will be struck down.

### E. Regulating Transportation of Nuclear Waste

State and local regulation concerning the transportation of radioactive materials can be categorized as follows: (1) total bans on the transportation of radioactive materials into or through the given jurisdiction; (2) extensive regulation of the time, manner, and routes of shipments of radioactive materials; (3) state or local monitoring and reporting requirements concerning such shipments; and (4) state or local acceptance of applicable federal regulations.<sup>271</sup>

At least fifteen states have statutes that regulate, or author-

<sup>267.</sup> ARIZ. REV. STAT. ANN. §§ 30-694, -695 (West. Supp. 1980-81); ILL. ANN. STAT. ch. 111½, 230.6 (Smith-Hurd 1977); La. Rev. STAT. ANN. §§ 30:1113-1114 (West Supp. 1980); WASH. REV. CODE ANN. §§ 43.31.300(5), 70.121.050 (Supp. 1980-81).

<sup>267.1</sup> ARIZ. REV. STAT. ANN. § 30-693 (West Supp. 1980-81); GA. CODE ANN. §§ 88-1306.1 (1979 & Supp. 1980); LA. REV. STAT. ANN. § 30:1112 (West Supp. 1981); WASH. REV. CODE ANN. §§ 43.31.300(4); 70.121.100 (Supp. 1980-81).

<sup>268.</sup> See note 29 supra.

<sup>269. 42</sup> U.S.C.  $\S$  2021 (1976 & Supp. II 1978). See text accompanying notes 28-34 supra.

<sup>270.</sup> See 42 U.S.C. § 2021(d)(2) (Supp. II 1978).

<sup>271.</sup> Trosten & Ancarrow, supra note 3, at 271-72.

ize state officials to regulate the transportation of radioactive materials (including nuclear waste) within their borders. Michigan. Montana. Pennsylvania, and Virginia have statutes that exempt from their scope radioactive materials transported in conformity with applicable federal law.272 Although it does not contain a general exemption, New Mexico's statute does exempt specifically from state regulation the transportation of "weapons grade [nuclear] material, radioactive waste resulting from processing weapons grade material or other radioactive material incidental to research which is under the exclusive control of the United States."278 Florida, Georgia, Iowa, North Carolina, Oregon, and South Dakota have statutes that direct the appropriate state official or agency to promulgate rules and regulations for the transportation of radioactive materials in the state, provided such rules and regulations are either compatible with applicable federal law or promulgated in cooperation with the appropriate federal agencies.274 Although ambiguous, New York's statute appears to acknowledge the supremacy of federal law regulating the transportation of hazardous materials (including nuclear materials).275

Connecticut and New Jersey have statutes that severely restrict the transportation of radioactive materials within their borders. Connecticut requires the issuance of a state permit before any person can transport into or through the state any quantity of radioactive material defined as "large quantity" material in the federal regulations, <sup>276</sup> any quantity of radioactive waste produced as part of the nuclear fuel cycle, or radioactive

<sup>272.</sup> MICH. COMP. LAWS ANN. §§ 333.13505, 333.13506(c) (Supp. 1980); MONT. REV. CODE ANN. § 75-3-104(c) (1979); PA. STAT. ANN. tit. 35, § 841.7 (Purdon 1980-81); VA. CODE § 18.2-278.7 (Supp. 1980).

<sup>273.</sup> N.M. STAT. ANN, § 74-4A-4C(5) (1979).

<sup>274.</sup> Fla. Stat. Ann. § 381.512(1)(c) (1975 & Supp. 1979); Ga. Code Ann. §§ 88-1302, -1306(d) (1979 & Supp. 1980); Iowa Code Ann. § 455B.87 (West Supp. 1980-81); N.C. Gen. Stat. § 104E-15(a)(3) (1979); Or. Rev. Stat. § 469.530(1) (1979); S.D. Codified Laws Ann. § 32-22-46.1 (Supp. 1980).

<sup>275.</sup> N.Y. Transp. Law § 14-f (McKinney Supp. 1980). Section 14-f.5 reads as follows: "With respect to the transportation of radioactive materials nothing in this section shall be construed to abrogate or affect the provisions of any other federal or state statute or local ordinance, regulation or resolution which are more restrictive than or which supersede the provisions of this section or regulations adopted pursuant hereto." *Id.* § 14-f.5.

<sup>276.</sup> See 10 C.F.R. part 71 (1980).

material or waste carried by a commercial carrier.<sup>277</sup> The State Commissioner of Transportation is directed to authorize the transportation of radioactive materials only after finding that such transportation can be accomplished in a manner protecting the public health and safety.<sup>278</sup> Connecticut specifically exempts from the scope of its statute the transportation of radioactive materials by or for the federal government for military or national security purposes.<sup>279</sup> Connecticut's statute does not exempt from its scope the transportation of nonmilitary radioactive materials that are shipped in compliance with applicable federal law.

New Jersey requires a state certificate of handling before allowing transport into or through the state of plutonium isotopes in excess of two grams or at least twenty curies, enriched uranium containing one kilogram or more of uranium-235, or actinides, spent nuclear fuel, or other radioactive materials with a radioactivity in excess of twenty curies.<sup>280</sup> New Jersey's statute does not contain any acknowledgment of the supremacy of applicable federal regulations.

In May 1980, South Carolina enacted a comprehensive statute for the regulation of the transportation and disposal of radioactive waste.<sup>281</sup> The statute requires any shipper of radioactive wastes to provide financial security sufficient to hold the state harmless for all claims or legal actions arising out of injury or damage occurring during the transportation of such wastes into or through the state.<sup>282</sup> In addition, any shipper of radioactive

<sup>277.</sup> CONN. GEN. STAT. ANN. § 19-409d(a) (West Supp. 1980).

<sup>278.</sup> Id. § 19-409d(b).

<sup>279.</sup> Id. § 19-409d(d). Quaere whether the Connecticut legislature intended to exempt shipments of nuclear waste produced as a result of the military's nuclear weapons program.

<sup>280.</sup> N.J. Stat. Ann. § 26:2D-18 (West Supp. 1980). This statute essentially is identical to a New York City ordinance, which is the subject of a pending lawsuit in the United States District Court for the Southern District of New York. See N.Y., N.Y. Health Code § 175.111 (1976), reprinted in 43 Fed. Reg. 16,961 (1978). See generally Jaksetic, supra note 2, at 370-72; Trosten & Ancarrow, supra note 3, at 276-85. On January 31, 1980, the Department of Transportation issued a notice of proposed rulemaking concerning the highway routing of radioactive materials. 45 Fed. Reg. 7140 (1980).

<sup>281.</sup> South Carolina Radioactive Waste Transportation and Disposal Act of 1980, Pub. L. No. 80-429, 1980 S.C. Acts, No. 1309 (to be codified at S.C. Code Ann. §§ 13-7-70, -85, -110 to -200).

<sup>282.</sup> Id. § 13-7-140.1, -140.3.

wastes must comply with applicable state and federal laws<sup>283</sup> and obtain a state permit authorizing the transportation of radioactive wastes into or within the state.<sup>284</sup> The State Department of Health and Enviornmental Control is directed to issue interim regulations to implement the statute until final regulations are promulgated.<sup>285</sup> The carrier actually transporting radioactive waste must comply with certain statutory requirements,<sup>286</sup> and no waste disposal facility in the state can accept radioactive waste for disposal unless the shipper has obtained a valid permit.<sup>287</sup> The statute provides for civil penalties in the event any person violates its provisions.<sup>288</sup> It is noteworthy that the statute's definitions of "carrier," "person," and "shipper" are broad enough to include the federal government or its agents.<sup>289</sup>

Because the transportation of radioactive materials generally constitutes interstate commerce or involves instrumentalities of interstate commerce, state laws purporting to regulate such transportation will be subject to close judicial scrutiny. Despite broad federal authority to regulate interstate commerce,<sup>290</sup> the Supreme Court has held that the states have wide discretion in regulating the use of public streets and highways even though such regulation affects or burdens interstate commerce, provided such regulation does not discriminate against interstate commerce or conflict with applicable federal laws.<sup>291</sup> Although there is a strong presumption that state regulations that promote highway safety are valid, the courts will examine such regulations to determine whether "the burden imposed upon [interstate] commerce is clearly excessive in relation to the putative

<sup>283.</sup> Id. § 13-7-140.2.

<sup>284.</sup> Id. § 13-7-140.7.

<sup>285.</sup> Id. § 13-7-160.

<sup>286.</sup> Id. § 13-7-150.

<sup>287.</sup> Id. § 13-7-170.B.

<sup>288.</sup> Id. § 13-7-180.

<sup>289.</sup> See id. §§ 13-7-120.A, .I, .K.

<sup>290.</sup> See text accompanying notes 140-59 supra.

<sup>291.</sup> South Carolina State Highway Dep't v. Barnwell Bros., 303 U.S. 177 (1938). Accord, Bibb v. Navajo Freight Lines, 359 U.S. 520, 523-24 (1959). The rationale for these cases is the well-established principle that state laws enacted pursuant to the state's police powers, which incidentally affect or burden interstate commerce, are not unconstitutional and may be enforced until superseded by federal laws enacted pursuant to the commerce clause. Great Atl. & Pac. Tea Co. v. Cottrell, 424 U.S. 366, 371 (1976); Huron Portland Cement Co. v. City of Detroit, 362 U.S. 440, 443-44 (1960); Savage v. Jones, 225 U.S. 501, 524-25 (1912); Hennington v. Georgia, 163 U.S. 299 (1896).

local benefits" of the highway safety regulations.<sup>292</sup> Accordingly, state and municipal regulation of road shipments of radioactive materials, including nuclear waste, is presumptively valid. If challenged, however, such regulations will be examined to determine whether they unduly burden interstate commerce or conflict with applicable federal laws. Because such an examination requires the balancing of local and federal interests within the context of the specific circumstances in which the state regulations are applied, it is beyond the scope of this Article to speculate on the validity of specific state laws under the commerce clause.<sup>293</sup>

### F. Regulating Nuclear Waste Disposal in Other Ways

California and Maine have enacted legislation that conditions the issuance of state licenses for future nuclear power plants upon a finding that the technical problems concerning radioactive waste disposal have been solved. No nuclear power plant is to be permitted land use in California or certified by the State Energy Resources Conservation and Development Commission until the Commission finds that "there exists a demonstrated technology or means for the disposal of high-level nuclear waste."294 The California legislature has the authority to "declare the findings [of the Energy Resources Conservation and Development Commission | null and void and take appropriate action."295 Related provisions of California law condition certification of nuclear power plants on a finding by the Commission that "there exists a technology for the construction and operation of, nuclear fuel rod reprocessing plants"296 and a study by the Commission concerning "the necessity for, and effectiveness and economic feasibility of, undergrounding and berm containment of nuclear reactors."297 Similarly, Maine law provides that

<sup>292.</sup> Raymond Motor Transp., Inc. v. Rice, 434 U.S. 429, 441 (1978)(quoting Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970)).

<sup>293.</sup> For a well-written analysis of the problem, see Trosten & Ancarrow, supra note 3. See also Kovacs, Transportation of Nuclear Material: The Public Challenge, 11 Rut.-Cam. L.J. 63 (1979).

<sup>294.</sup> CAL. Pub. Res. Code § 25524.2(a) (West 1977).

<sup>295.</sup> Id. § 25524.2(b).

<sup>296.</sup> Id. § 25524.1.

<sup>297.</sup> Id. § 25524.3. "Undergrounding and berm containment are two methods of isolating atomic reactors so that radiation leakage is prevented in the event of a major

the State Public Utilities Commission "shall not certify any nuclear power plant until . . . [t]he commission finds that the United States Government, through its authorized agency, has identified and approved a demonstrable technology or means for the disposal of high-level nuclear waste."<sup>298</sup> In a direct challenge to the federal government, Maine law declares that "[a]ny other governmental entity which grants necessary permits, licenses, approvals or authorizations for construction of a nuclear power plant may process and grant those permits, licenses, approvals or authorizations, subject to the commission's granting of certification under this chapter."<sup>299</sup>

In Pacific Legal Foundation v. State Energy Resources Conservation & Development Commission, 300 decided in March 1979, the United States District Court for the Southern District of California struck down section 25524.2 of the California statute 301 on the grounds that it was preempted by the Atomic Energy Act of 1954 and that it constituted an impermissible obstacle to the congressional objective of promoting commercial nuclear power. 302 Although plaintiffs also challenged the constitutionality of sections 25524.1 and 25524.3, 303 the court ruled

reactor accident. Undergrounding is the procedure whereby a cavern is excavated in solid rock and the atomic reactor is placed inside. The cavern rock serves as the principal plant structure. Berm containment consists of placing a reactor in a large pit, constructing a domed concrete shell over the reactor site, and covering the dome with the dirt obtained from the pit excavation. A berm-contained plant uses the concrete dome as its principal structure, and the dome protects against radiation leakage. When properly designed, either method can withstand the most severe foreseeable reactor accident by venting the radioactive gases released by the accident into pathways in the cavern or berm, thereby reducing the pressure on the reactor containment system." Handler, California's Nuclear Power Plant Siting Legislation: A Preemption Analysis, 52 So. Cal. L. Rev. 1189, 1205-06 (1979)(footnote omitted).

<sup>298.</sup> Me. Rev. Stat. Ann. tit. 10, § 253 (1980).

<sup>299.</sup> Id. § 256.

<sup>300, 472</sup> F. Supp. 191 (S.D. Cal. 1979).

<sup>301.</sup> CAL. Pub. Res. Code § 25524.2 (1977).

<sup>302.</sup> Pacific Legal Foundation v. State Energy Resources Conservation and Dev. Comm'n, 472 F. Supp. 191 (S.D. Cal. 1979). For discussions of the District Court's opinion, see Handler, supra note 297, at 1233-36; Moran, On Preempting State Initiatives Relating to the Disposal of Nuclear Waste, 61 Chi. B. Rec. 179 (1979); Wiggins, Federalism Balancing and the Burger Court: California's Nuclear Law as a Preemption Case Study, 13 U. Cal. D.L. Rev. 1, 57-86 (1979-800); Note, May a State Say "No" to Nuclear Power? Pacific Legal Foundation Gives a Disappointing Answer, 10 Envr'l L. 189 (1979). For an interesting pre-Pacific Legal Foundation analysis of the constitutionality of the California statute, see Tribe, supra note 111.

<sup>303.</sup> CAL. Pub. Res. Code §§ 25524.1, .3 (West 1977).

that those statutory provisions were not properly before it. 304 If upheld on appeal, the court's decision will constitute yet another reaffirmation of the expansive preemption view of Northern States Power Co. and its progeny. Although not binding on other federal district courts, the opinion of the District Court for the Southern District of California probably will be accepted as persuasive authority in any challenge to Maine's statute. Even if the reasoning of Pacific Legal Foundation is not followed by a federal court considering a challenge to the constitutionality of Maine's statute, the undisguised effort of Maine to condition the validity of NRC licensing of nuclear power plants on prior state certification probably will be struck down summarily as violative of the doctrine of intergovernmental immunities. 305

#### VI. Conclusion

The efforts of various states to regulate nuclear waste pursuant to their inherent police powers face serious legal obstacles because of the prevailing view on federal preemption of radiation hazards regulation. Unfortunately, the majority view that the federal government can preempt wholly the field of radiation hazards regulation is based on an inadequate analysis of the constitutional bases for such an assertion of federal authority. Any resolution of the preemption issue must include a serious evaluation of the limited scope of federal authority and consideration of the proper constitutional relationship between the state and federal governments in resolving the problem of nuclear waste disposal. Proponents of a strong federal preemption view should pause and reflect on the implications of their arguments for a limited, constitutional government. However serious the problem of nuclear waste disposal and however desirable a uniform, national approach to the problem, we cannot afford to solve the problem in a manner which sacrifices constitutional principles crucial to our system of limited government.

On the other hand, those states wishing to assert regulatory authority over radioactive waste must realize that the assumption of such authority necessarily entails serious responsibilities. To the extent that states successfully challenge federal preemp-

<sup>304. 472</sup> F. Supp. at 194.

<sup>305.</sup> See text accompanying notes 128-35 supra.

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tion of the regulation of radiation hazards, they must accept the responsibilities that such a successful challenge would place upon them. For political reasons many states may decide that they prefer to leave the problem of radioactive waste in the hands of the federal government. Whatever the political climate, the courts have the weighty responsibility of ensuring that fundamental principles of federalism and constitutional law are not sacrificed in the political struggles engendered by the problem of nuclear waste management.