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IDENTIFYING THE CRUCIAL ELEMENTS OF STATES' COLLABORATION OVER THE LONG HAUL: THE TRANSPORTATION OF NUCLEAR WASTE TO NEW MEXICO

Kerry E. Rodgers*

INTRODUCTION

States increasingly have pursued regional strategies to address shared problems. Such strategies range from formal to informal arrangements. Some include federal participation or support, but many have emerged in the absence of federal requirements, financial assistance, or other support—or even with the threat of federal opposition.¹ State regional initiatives include efforts to address climate change by reducing greenhouse gas emissions; some examples are: interstate cooperation on renewable portfolio standards mandating the use of renewable energy through renewable energy credits; East and West Coast states' adoption of California motor vehicle emissions standards; and the Northeast states' Regional Greenhouse Gas Initiative (RGGI), an emissions trading pro-

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1. Barry G. Rabe, *Regionalism and Global Climate Change Policy: Revisiting Multistate Collaboration as an Intergovernmental Management Tool*, in INTERGOVERNMENTAL MGMT. FOR THE 21ST CENTURY 176, 176–77 (Timothy J. Conlan & Paul L. Posner eds., 2008).

gram.² Regional efforts to address regional problems have emerged as centers of policy innovation.³

Meanwhile, new challenges such as the emphasis on national security following the September 11, 2001, attacks and the recent economic crisis have placed unprecedented demands on federal, state, local, and tribal governments and their regional relationships.⁴ Across areas of policy, strapped federal and state budgets force difficult decisions at every level about programmatic priorities and resource allocation.

It is too soon to gauge how these emerging stressors will impact intergovernmental relations in the future. However, it is indisputable that state, local, and tribal governments that manage to collaborate with one another and with their federal counterparts to address common problems stand to benefit in many ways. For instance, successful collaborators may achieve progress on policy despite gridlock in Congress, may benefit from shared expertise and resources, and may witness their policy and program innovations modeled by others. These and other potential benefits create a premium on understanding why states collaborate within the federal system and what conditions can enable them to do so most effectively.⁵

To foster such understanding, this article analyzes a collaboration that dates back more than two decades. This article examines the efforts of state regional organizations and the U.S. Department of Energy (DOE) to promote the safe transportation of transuranic (TRU) radioactive waste generated in nuclear weapons production and other defense programs to the Waste Isolation Pilot Plant (WIPP). WIPP is the DOE's permanent repository for TRU waste, and is located in the underground

2. See *id.* at 176–205; Kirsten H. Engel, *Mitigating Global Climate Change in the United States: A Regional Approach*, 14 N.Y.U. ENVTL. L.J. 54, 58 (2006) (arguing that a regional approach to climate change is likely to yield greater emissions reductions and be more effective and efficient than actions by individual states acting independently).

3. Paul L. Posner & Timothy J. Conlan, *Conclusion: Managing Complex Problems in a Compound Republic*, in INTERGOVERNMENTAL MGMT., *supra* note 1, at 338, 347.

4. In the homeland security arena, for example, it is necessary to balance the need for local governments to meet minimum standards and coordinate nationwide while retaining flexibility in planning to reflect local conditions. Charles R. Wise & Rania Nader, *Developing a National Homeland Security System: An Urgent and Complex Task in Intergovernmental Relations*, in INTERGOVERNMENTAL MGMT., *supra* note 1, at 77, 85.

5. Throughout this article, I generally use the term “states” because the states, acting through state regional organizations, are the most prominent in the WIPP transportation program. However, local and tribal governments could, and likely do, perform many of the same functions that the states perform in the WIPP transportation program and realize many of the same benefits.

salt beds southeast of Carlsbad, New Mexico.⁶ The Waste Isolation Pilot Plant Land Withdrawal Act of 1992 (WIPP LWA) established a regulatory framework for WIPP, giving the U.S. Environmental Protection Agency (EPA) responsibility for regulatory oversight of the DOE's disposal of waste at the repository.⁷ The WIPP LWA also established a framework governing the transportation of TRU waste from DOE sites around the country to WIPP, which accepted its first waste shipments in 1999.⁸ Building on preexisting agreements between the DOE and the State of New Mexico the WIPP LWA directed the Secretary of Energy to provide financial assistance to states and tribes for accident prevention, emergency preparedness training, and other transportation safety programs.⁹

New Mexico and other states with an interest in TRU waste generally have relied on state regional organizations to work collaboratively with the DOE to promote the safe transportation of TRU waste from DOE sites to WIPP. The DOE's Carlsbad Field Office provides assistance to Native American tribal governments affected by WIPP shipments as well. Waste shipments are expected to travel by truck through some thirty states and eleven Native American tribal nations as they make their way to WIPP over an anticipated thirty-year disposal phase.¹⁰

6. The WIPP LWA defines "transuranic waste" as "waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes per gram of waste, with half-lives greater than 20 years"; exceptions include: "high-level radioactive waste"; certain other waste exempted by the Secretary of Energy; and other waste subject to disposal approved by the Nuclear Regulatory Commission "on a case-by-case basis." Pub. L. No. 102-579, § 2(20), 106 Stat. 4777, 4779 (1992). The statute also defines two types of TRU waste: "remote-handled" TRU waste, which is more highly radioactive and requires greater protections for workers, and "contact-handled" TRU waste. *Id.* §§ 2(3), 2(12). TRU waste is not as radioactive as the high-level waste generated by nuclear power plants. However, plutonium—the most prevalent element in TRU waste—has a long half-life, requiring isolation for tens of thousands of years, and inhalation or ingestion exposure to very small amounts poses health risks. See CARLSBAD AREA OFFICE, U.S. DEP'T OF ENERGY, THE WASTE ISOLATION PILOT PLANT: PIONEERING NUCLEAR WASTE DISPOSAL 3 (2000), available at <http://www.wipp.energy.gov/library/pioneering/pioneering.htm> [hereinafter PIONEERING NUCLEAR WASTE DISPOSAL].

7. Pub. L. No. 102-579, 106 Stat. 4777 (1992).

8. *Id.* § 16; PIONEERING NUCLEAR WASTE DISPOSAL, *supra* note 6, at 15.

9. Sec. 16(a), 106 Stat. at 4792.

10. W. GOVERNORS' ASS'N WIPP TRANSPORTATION TECHNICAL ADVISORY GROUP, REPORT TO WESTERN GOVERNORS ON THE STATUS OF THE WIPP TRANSPORTATION SAFETY PROGRAM 5 (2004), available at http://www.westgov.org/component/joomdoc/doc_download/295-wipp-govs-rpt6-04.

The WIPP transportation program has evolved over the years. Through the 1990s, the affected states planned for the first WIPP shipments.¹¹ Since WIPP opened in March 1999, the program has grown in both scale and complexity. The pace of WIPP shipments has increased as a growing number of DOE waste generator sites have characterized and prepared their waste for shipment.¹² An increasing number of states have found themselves on the “WIPP route” traveled by trucks bearing TRU waste.¹³ Awareness of the threat of terrorist acts against WIPP shipments also has complicated radioactive waste transportation, particularly since September 11, 2001.¹⁴ The states’ longtime collaboration with the DOE to implement the WIPP LWA’s transportation provisions therefore offers a rare opportunity to examine how a regional collaborative structure has fared as its responsibilities have expanded and its work has taken on a mantle of post-9/11 security concerns.

Part I of this article introduces the legal and regulatory framework governing the transportation of waste to WIPP, and Part II introduces the state regional organizations and other major players in the transportation program. Part III discusses four aspects of collaboration in the program: (1) states’ motivations for collaborating; (2) the functions that the state regional organizations have performed; (3) outcomes of the WIPP transportation program thus far; and (4) challenges that lie ahead. While the program has not escaped criticism, particularly for shortcomings at the local level, the program has facilitated the transportation of TRU waste without an accidental radiological release or other serious accident. Furthermore, it has enabled creative learning and advocacy on the part of the states, with respect to both the DOE and national radioactive waste policy. Based on this analysis, Part IV identifies six crucial ingredients of the states’ regional collaboration on TRU waste transportation: (1) high-level political attention and accountability; (2) multidisciplinary and commit-

11. *WGA Radioactive Waste Transportation Program*, W. GOVERNORS’ ASS’N 1, http://www.westgov.org/component/joomdoc/doc_download/265-wipp-transportation-plan (last visited Jan. 21, 2009).

12. *Id.* By the end of 2002, the waste generator sites included the Hanford Site, the Idaho National Engineering and Environmental Laboratory, Los Alamos National Laboratory, the Rocky Flats Environmental Technology Site, and the Savannah River Site. *Id.*

13. The states along the route include New Mexico, Texas, Arizona, California, Utah, Nevada, Oregon, Washington, Idaho, Colorado, Wyoming, and Nebraska. *Id.* at 1–2.

14. See Letter from Frank H. Moussa, Chair, CSG Midwestern High-Level Radioactive Waste Committee, et al., to Spencer Abraham, Deputy Assistant Secretary, U.S. Dep’t of Energy 3 (Dec. 11, 2001), available at <http://www.csgmidwest.org/MRMTF/documents/AbrahamLetterDecember2001.pdf>.

ted state professionals; (3) shared responsibility and pride in addressing a national policy issue; (4) a commitment to exceed legal requirements; (5) a “living,” organic structure; and (6) the capacity for periodic program evaluations and updates.

This article contends that these ingredients together offer a model for states’ long-term collaboration on other policy problems. Where the six crucial ingredients are present, effective state and federal collaboration is likely to occur in response to other challenges, particularly those that join environmental and security issues. This article’s analysis of the WIPP transportation program further suggests that collaboration over time has a transformative effect on traditional models of federalism and federal-state relations. This gives rise to dynamism and creates the potential for creative problem-solving and adaptive management. However, severe budget shortfalls and associated political pressures to scale back policy initiatives will test prospects for such collaboration in the future. Such collaboration may also be limited by the ability of various governments to defer action on problems for which action is not mandatory and may be indefinitely postponed and avoided, in contrast to TRU waste transportation.

I. THE LEGAL FRAMEWORK FOR THE WIPP TRANSPORTATION PROGRAM

The collaboration among states that drives the WIPP transportation program today appears rooted in two strands of activity dating back to the 1970s: states’ advocacy of a national policy for nuclear waste and the cleanup of nuclear weapons facilities; and the special role of New Mexico, WIPP’s host state, in planning for the repository.¹⁵ The National Governors Association (NGA) developed the principle of “consultation and concurrence” while working on proposed—but never enacted—nuclear waste legislation in 1977–78; President Jimmy Carter adopted the principle in a major policy statement on nuclear waste in February 1980.¹⁶ To

15. State officials involved with the program also cite a 1982 executive order providing for intergovernmental cooperation as being “pivotal” to collaboration between states and the DOE in connection with WIPP. Anne deLain W. Clark & Tammy C. Ottmer, WIPP Transportation Safety Program: A Model Framework for Collaboration among States and Agencies in the Transportation of Radioactive Waste 2–3 (Oct. 2007) (paper presented at the International Packaging and Transportation of Radioactive Materials (PATRAM) Symposium, Miami, FL), *available at* <http://www.cdphe.state.co.us/epr/Public/WIPP/WIPPModelFramework.pdf>; see Exec. Order No. 12,372, 3 C.F.R. 197 (1982).

16. LUTHER J. CARTER, NUCLEAR IMPERATIVES AND PUBLIC TRUST: DEALING WITH RADIOACTIVE WASTE 140 (1987).

the NGA, the President, and his Interagency Review Group studying nuclear waste, the principle meant that a state considering hosting a waste disposal site would be continuously consulted and had to be satisfied and concur with any progress before each new stage began; however, environmentalists interpreted the principle as tantamount to a state veto, if a state withheld its concurrence at any point.¹⁷ By the late 1980s, when the DOE and several states signed Resource Conservation and Recovery Act (RCRA) cleanup agreements for DOE facilities, several governors whose states housed nuclear weapons facilities were advocating for federal legislation that would create a national program for the environmental cleanup of such facilities, with an important role for the states.¹⁸ The so-called Ten Governors' Proposal sought legislation that would include an open decision-making process, transportation planning and emergency response training measures, and participation and funding for affected states, among other measures.¹⁹ A joint task force of the NGA and the National Association of Attorneys General seconded the ten governors' recommendations.²⁰

Meanwhile, New Mexico had been active in planning for WIPP's operations, including the transportation of TRU waste, since WIPP's conception. In 1975, Governor Jerry Apodaca established a Governor's Advisory Committee on WIPP; its ten members came from the New Mexico scientific and academic community.²¹ In 1978, Senator Pete V. Domenici and other members of the New Mexico congressional delegation extracted a promise from Secretary of Energy James R. Schlesinger that the DOE would not build WIPP over the state's opposition, although the DOE's general counsel and others later maintained that the promise was not enforceable.²²

A. 1979 WIPP-Authorizing Legislation

In 1979, Congress codified a role for New Mexico in WIPP decisions in an appropriations law authorizing the DOE to develop WIPP as "a research and development facility to demonstrate the safe disposal of ra-

17. *Id.* at 140-41.

18. Michael W. Graine, *Nuclear Weapons Waste: Recent Federal Legislation and the Cleanup Effort*, 30 WILLAMETTE L. REV. 765, 772-74 (1994).

19. *Id.* at 773-74.

20. *Id.* at 774. The ten governors were from Colorado, Idaho, Kentucky, New Mexico, Nevada, Ohio, Oregon, South Carolina, Tennessee, and Washington. *Id.* at 773 n.52.

21. Clark & Ottmer, *supra* note 15, at 2.

22. CARTER, *supra* note 16, at 185-86.

radioactive wastes resulting from the defense activities and programs of the United States.”²³ Congress directed:

In carrying out such project, the Secretary [of Energy] shall consult and cooperate with the appropriate officials of the State of New Mexico, with respect to the public health and safety concerns of such State . . . and shall, consistent with the purposes of subsection (a), give consideration to such concerns and cooperate with such officials in resolving such concerns.²⁴

Congress further directed the Secretary of Energy to “seek to enter into a written agreement with the appropriate officials of the State of New Mexico” by September 30, 1980, in order to spell out the procedures for the requisite consultation and cooperation regarding WIPP.²⁵ Congress mandated that the procedures,

include as a minimum—

(A) the right of the State of New Mexico to comment on, and make recommendations with regard to, the public health and safety aspects of such project before the occurrence of certain key events identified in the agreement;

(B) procedures, including specific time frames, for the Secretary to receive, consider, resolve, and act upon comments and recommendations made by the State of New Mexico; and

(C) procedures for the Secretary and the appropriate officials of the State of New Mexico to periodically review, amend, or modify the agreement.²⁶

Finally, Congress required that the Secretary of Energy transmit the DOE’s agreement with the state to the House and Senate Armed Services committees for a forty-five-day review period before the agreement became effective.²⁷ The Secretary also had to “promptly notify” both committees of any amendments or modifications to the agreement.²⁸ Thus, while the WIPP-authorizing legislation contemplated that New Mexico would have significant opportunities to influence the DOE’s

23. Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980, Pub. L. No. 96-164, § 213(a), 93 Stat. 1259, 1265.

24. *Id.* § 213(b)(1).

25. *Id.* § 213(b)(2).

26. *Id.*

27. *Id.* § 213(b)(3).

28. *Id.*

WIPP decisions, Congress stopped short of granting the state a veto over WIPP, which some New Mexican politicians had sought.²⁹

B. Consultation and Cooperation with New Mexico

Before a “consultation and cooperation” agreement was in place, the DOE unilaterally announced early in 1981 that it would build WIPP, provided that the site was not found to be unsuitable.³⁰ Jeff Bingaman, then Attorney General of New Mexico, soon filed a lawsuit challenging the DOE’s plans in federal district court in New Mexico, presumably because the DOE’s announcement ran counter to the state’s understanding of the “consultation and cooperation” provision in WIPP’s 1979 authorizing legislation.³¹ Intervention by Secretary of Energy James B. Edwards, who met with New Mexico Governor Bruce King, led to a settlement in which the DOE granted concessions to address many of the state’s concerns, including various “off-site” concerns relating to waste transportation.³² The DOE and the state also agreed to execute a broader, legally binding consultation and cooperation agreement to “provide for the timely exchange of information about the WIPP project and procedures for them to follow to attempt to resolve conflicts between them relating to the public health, safety or welfare of the citizens of the State should any conflicts arise during the course of [the WIPP] project.”³³ The court approved two settlement documents in July 1981.³⁴

The “Agreement for Consultation and Cooperation,” signed by Secretary Edwards and Governor King, reflected WIPP’s mission under its authorizing legislation.³⁵ The agreement provided that “WIPP is intended to include receipt, handling and permanent disposal of transuranic waste and temporary storage for experimental purposes of a limited amount of high-level waste,” with the amount of radioactivity to be determined in a

29. CARTER, *supra* note 16, at 187 (concluding that the legislation’s provision for a “‘consultation and cooperation’ agreement put New Mexico in a position where DOE had to give great weight to the state’s demands”); *see id.* at 186 (noting efforts by the New Mexico attorney general at the time and Senator Pete Domenici to secure a legal right for the state to veto WIPP).

30. *Id.* at 187.

31. *Id.*

32. *Id.* at 187–88 (explaining the political context of the settlement).

33. Stipulated Agreement at 2–3 *New Mexico v. U.S. Dep’t of Energy*, No. 81-0363 JB (D.N.M. July 1, 1981) [hereinafter Stipulated Agreement].

34. *See id.* and Agreement for Consultation and Cooperation (executed June 30, 1981, and July 1, 1981) (copy on file with author); *see also* CHUCK McCUTCHEON, NUCLEAR REACTIONS: THE POLITICS OF OPENING A RADIOACTIVE WASTE DISPOSAL SITE 78–80 (2002) (discussing the lawsuit and the settlement).

35. *See* Agreement for Consultation and Cooperation, *supra* note 34, art. VI, ¶ A.

Safety Analysis Report prepared by the DOE.³⁶ Radioactive material used in the high-level waste experiments was required to be removed from the WIPP site upon completion of the experiments, and the TRU waste would be subject to retrievability for a period prior to permanent disposal.³⁷ The agreement acknowledged the following disparate responsibilities of the federal and state governments:

- (1) the United States Government's responsibility for national security;
- (2) [the] DOE's responsibility . . . for safe disposal of [defense] radioactive wastes . . . ; and
- (3) the State's responsibility for the welfare of its citizens including, but not limited to, public health and safety, environmental and socioeconomic aspects of the transportation, handling, storage and disposal of radioactive wastes in New Mexico.³⁸

Committing to a dynamic, adaptive process, the parties specified procedures for seeking to modify the agreement in light of new developments or changes in the law,³⁹ or to abandon the agreement if WIPP's mission "substantially changed."⁴⁰

The second agreement addressed waste transportation. The DOE agreed, prior to February 1, 1982, to create and participate in "a State-Federal task force comprised of all federal governmental agencies with jurisdiction over or responsibility for activities related to WIPP" and to "join with the State, where appropriate, in seeking and recommending federal or Congressional resolution" of the state's WIPP-related concerns.⁴¹ An "off-ramp" provision allowed that if, after the task force negotiations, the state was not satisfied that its concerns would be resolved before a decision to authorize construction of a permanent facility, the state could raise certain issues in a trial.⁴²

As it happened, the state never needed to use the "off-ramp" provision. The task force negotiations resulted in a DOE-New Mexico agreement that addressed the state's concerns about its potential liability for WIPP-related nuclear incidents, emergency response preparedness, the monitoring of WIPP waste during transportation, and state highway up-

36. *Id.* ¶ B.

37. *Id.* The WIPP LWA later modified these plans.

38. *Id.* at 1.

39. *Id.* art. V, ¶ A.

40. *Id.* art. I, ¶ B. The agreement further provided that "the parties shall not be bound to comply with certain provisions of the Agreement if such changes in the WIPP mission make a particular provision impossible to perform or enforce." *Id.*

41. Stipulated Agreement, *supra* note 33, at 5–6.

42. *Id.* at 6.

grades.⁴³ The agreement first gave the state a significant role in the anticipated WIPP transportation program and foretold issues that Congress would take up in the WIPP LWA a decade later. The DOE acknowledged that the state could independently monitor the transportation of WIPP shipments within state borders and could access relevant records.⁴⁴ Second, the DOE agreed that the state could engage in monitoring and inspecting WIPP shipments at WIPP, at the shipments' points of entry into New Mexico, and at the shipments' points of origin—even at DOE sites outside of New Mexico.⁴⁵ Third, the DOE committed to providing financial assistance for one environmental scientist and for necessary radiation detection and monitoring equipment over WIPP's operational lifetime.⁴⁶ Fourth, the DOE agreed to reach a written agreement with the state as to the suitability of any additional highway routes for WIPP shipments, if necessary,⁴⁷ and as to the suitability of possible rail shipments of waste to WIPP.⁴⁸ Finally, the DOE committed to giving the state "detailed and timely prior notification of high-level nuclear waste shipments and such other notification regarding other nuclear waste shipments as the parties may agree to from time to time" in order to facilitate the state's emergency response functions.⁴⁹

The agreement also provided for DOE-New Mexico collaboration on emergency preparedness. The DOE and the state acknowledged the need for both parties to develop an emergency response plan for WIPP-related emergencies, and they "recognized that the State's plan will encompass matters unrelated to WIPP and will involve federal departments and agencies other than D.O.E."⁵⁰ The state agreed to undertake "a good-faith effort to take all reasonable legislative and administrative actions required to qualify the State for other federal assistance before seeking the assistance of D.O.E."⁵¹ The DOE, in turn, committed to help-

43. See Supplemental Stipulated Agreement Resolving Certain State Off-Site Concerns Over WIPP, *New Mexico v. Dep't of Energy*, No. 81-0363 JB (D.N.M. Dec. 27, 1982) (copy on file with author) [hereinafter Supplemental Stipulated Agreement].

44. *Id.* at 19. The agreement covered "pertinent shipping records, and records and documents kept by D.O.E., relating to the type, source, curie content and nature of the waste being shipped to or from the WIPP site to insure compliance by the carriers with D.O.T. or D.O.E. standards for shipping nuclear waste." *Id.*

45. *Id.* at 19–20.

46. *Id.* at 23.

47. *Id.* at 21.

48. *Id.* at 22.

49. *Id.* at 22–23.

50. *Id.* at 12–13.

51. *Id.* at 13.

ing the state “in dealing with” other federal agencies,⁵² and made a broad commitment to respond to WIPP-related radiological accidents or emergencies in New Mexico.⁵³ The DOE additionally addressed the state’s concerns about funding to upgrade and expand state highways along the WIPP route.⁵⁴

The DOE and the State of New Mexico agreed on other transportation-related issues as the WIPP’s anticipated opening approached. Notably, the DOE agreed in 1987 that the transportation of waste to WIPP would comply with applicable U.S. Department of Transportation (DOT) and U.S. Nuclear Regulatory Commission (NRC) regulations, and that all waste would be shipped to WIPP in NRC-certified packages.⁵⁵

C. *The Beginnings of Regional Collaboration*

States’ collaboration on a regional basis got underway in 1988, when the DOT provided funding for a Western Governors’ Association (WGA) report to Congress on the “opinions, concerns, and priorities for actions” of the seven western states expected to be most affected by the early waste shipments to WIPP.⁵⁶ According to the Supplemental Stipulated Agreement, the resulting June 1989 report “emphasized that a collaborative, regional approach to planning would be a key step toward developing and implementing a credible accident prevention and safety program for transporting TRU waste.”⁵⁷ The report also stressed the importance of “consistent and assured financial support” for state efforts.⁵⁸ A 1991 WGA report for the Western Governors and the Secretary of Energy “defined the programs and procedures necessary to achieve a safe transportation system and assigned priorities for implementing these programs and procedures.”⁵⁹ The DOE agreed with the report’s findings and

52. *Id.* at 13.

53. *Id.* at 13–14.

54. *Id.* at 30–31; Agreement Between the State of New Mexico and the Dep’t of Energy, at 1–2 (executed Aug. 4, 1987) (copy on file with author).

55. Second Modification to the July 1, 1981, “Agreement for Consultation and Cooperation” on WIPP by the State of New Mexico and U.S. Dep’t of Energy, at 5 (executed Aug. 4, 1987) (copy on file with author).

56. TASK FORCE ON NUCLEAR WASTE, W. GOVERNORS’ ASS’N, REPORT TO CONGRESS: TRANSPORT OF TRANSURANIC WASTES TO THE WASTE ISOLATION PILOT PLANT i (1989), available at <http://www.nwtrb.gov/meetings/1991/march/ross.pdf>.

57. Clark & Ottmer, *supra* note 15, at 3.

58. *Id.*

59. Memorandum of Agreement Between the Western Governors and U.S. Department of Energy, Regional Protocol for the Safe and Uneventful Transportation of Transuranic Waste 2 (Feb. 25, 2003), available at <http://www.westgov.org/wga/>

entered into a cooperative agreement with the WGA to support states' efforts concerning the transportation of TRU waste.⁶⁰

D. The WIPP LWA Transportation Provisions

The WIPP LWA affirms and elaborates upon the agreements between the DOE and the State of New Mexico with respect to TRU waste transportation, and the legislation extends much of the support that already was available to New Mexico to other states that would be affected by the transportation of waste to WIPP.⁶¹ Provisions of the legislation address advance notification of waste shipments, accident prevention and emergency response training, transportation safety, and shipping containers and transportation rules. As a result of states' and tribes' collaboration with the DOE, the program also contains several elements that go beyond those required by law.⁶²

The WIPP LWA requires the DOE to "provide advance notification to States and Indian tribes through whose jurisdiction the Secretary plans to transport transuranic waste to or from WIPP."⁶³ Notification of planned WIPP shipments occurs on an annual, fourteen-day, and *en route*

initiatives/wipp/PIG-Web/Introduction/2003%20MOA.pdf [hereinafter 2003 Regional Protocol].

60. *Id.*; see Clark & Ottmer, *supra* note 15, at 3.

61. The WIPP LWA defines the "agreement" as

the July 1, 1981, Agreement for Consultation and Cooperation, as amended by the November 30, 1984 "First Modification", the August 4, 1987 "Second Modification", and the March 18, 1988 "Third Modification", or as it may be amended after the date of enactment of this Act, between the State and the United States Department of Energy as authorized by section 213(b) of the Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (Pub. L. 96-164; 93 Stat. 1259, 1265).

Pub. L. No. 102-579, § 2(2) 106 Stat. 4777, 4777; see *id.* § 2(17) (defining the "Supplemental Stipulated Agreement" as "the Supplemental Stipulated Agreement Resolving Certain State Off-Site Concerns Over WIPP, dated December 27, 1982, to the Stipulated Agreement Between DOE and the State in *State of New Mexico ex rel. Bingaman v. DOE*, Case No. CA 81-0363 JB (D. N. Mex.), dated July 1, 1981"). Section 21 of the WIPP LWA provides, in relevant part, that "[n]othing in this Act shall affect . . . the Supplemental Stipulated Agreement between the State and the United States Department of Energy except as explicitly stated herein." *Id.* § 21.

62. *WIPP Transportation Safety Program: Program Summary*, N.M. ENERGY, MINERALS AND NAT. RESOURCES DEP'T, <http://www.emnrd.state.nm.us/WIPP/ProgramSummary.htm> (last visited Aug. 21, 2010).

63. Pub. L. No. 102-579, § 16(b), 106 Stat. 4777 (1992).

basis.⁶⁴ Eight-week rolling schedules are provided as well for planning purposes.⁶⁵

The WIPP LWA further requires that the DOE “provide technical assistance and funds for the purpose of training public safety officials, and other emergency responders . . . in any State or Indian tribe through whose jurisdiction the Secretary plans to transport transuranic waste to or from WIPP.”⁶⁶ The training must address routine waste transportation and emergency response, and it must include components for distinct audiences: government officials and public safety officers; emergency response personnel; radiological protection and emergency medical personnel; and the public.⁶⁷ The DOE is obligated to “periodically review the training provided . . . in consultation with affected States and Indian tribes.”⁶⁸ In addition, the WIPP LWA authorizes the DOE to provide states with monetary grants or in-kind contributions to help them acquire emergency response equipment for WIPP transportation incidents.⁶⁹

Congress expressly provided for DOE enforcement of states’ implementation of the required emergency response medical training for incidents involving TRU waste transportation to or from WIPP.⁷⁰ The WIPP

64. U.S. DEP’T OF ENERGY, WASTE ISOLATION PILOT PLANT TRANSPORTATION PLAN, PUB. NO. DOE/CBFO 98-3103, Rev. 1, 20 (2002), available at http://www.westgov.org/component/joomdoc/doc_download/265-wipp-transportation-plan [hereinafter WIPP TRANSPORTATION PLAN].

65. *Id.*

66. Sec. 16(c)(1)(A). Congress also directed the DOE to submit, by the end of November 1992, a report to Congress and to the states and Indian tribes through whose jurisdiction the DOE plans to transport transuranic waste on the training provided through fiscal year 1992. *Id.*

67. Sec. 16(c)(1)(D)(i)-(iv). For an overview of the training required under 29 C.F.R. § 1910.120, see *Sidebar 5.3, Emergency Responder Training*, in COMM. ON TRANSP. OF RADIOACTIVE WASTE, NATIONAL RESEARCH COUNCIL, GOING THE DISTANCE? THE SAFE TRANSPORT OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE IN THE UNITED STATES 250–51 (2006). The WIPP LWA also provides that “[i]f determined by the Secretary, in consultation with affected States and Indian tribes, to be necessary and appropriate, training described in subparagraph (A) shall continue after the date of the enactment of this Act until the transuranic waste shipments to or from WIPP have been terminated.” Sec. 16(c)(1)(B).

68. Sec. 16(c)(1)(B). The Occupational Safety and Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) also must review the training for compliance with 29 C.F.R. § 1910.120, though the WIPP LWA does not specify a schedule for these compliance reviews. See § 16(c)(1)(C).

69. Sec. 16(c)(2).

70. The WIPP LWA provides that “[i]f the Secretary determines that [such training] is inadequate, the Secretary shall take immediate action to correct the inadequacies and, if necessary, suspend transportation of such transuranic waste.” Sec.

LWA also requires the DOE to develop, provide, and monitor “in-kind, financial, technical, and other appropriate assistance” to states or tribes through whose jurisdiction the DOE plans to transport TRU waste to or from WIPP, “for the purpose of WIPP-specific transportation safety programs not otherwise addressed” in the WIPP LWA.⁷¹

In a “working” document known as the *Waste Isolation Pilot Plant Transportation Plan* (WIPP Transportation Plan or Plan), the DOE’s Carlsbad Field Office (CBFO) spells out exactly how the statutory mandates are to be implemented by the DOE and its contractors, the state regional organizations, the states, and others.⁷² The *WIPP Transportation Plan* also incorporates the transportation-related requirements of the 1981 and 1982 agreements between the DOE and the State of New Mexico, as well as protocols contained in two regional guides prepared by the WGA and the Southern States Energy Board (SSEB), as appropriate.⁷³ Applicable provisions “are incorporated directly or by reference into cooperative agreements between the CBFO, regional organizations, and tribal governments along the WIPP shipping routes”; they also are incorporated into the CBFO’s contracts with its carriers.⁷⁴ The CBFO prepared the *Plan* in cooperation with New Mexico and other states in the WGA, the SSEB, the Council of State Governments–Midwest (CSG Midwest), and the Council of State Governments–Eastern Regional Conference (CSG/ERC), and tribal governments.⁷⁵

In addition to the WIPP LWA, WIPP shipments must comply with other federal requirements, such as DOT hazardous materials transportation regulations. States also regulate the transport of TRU and other radioactive wastes through their jurisdictions, often by imposing fees or restrictions on truck shipments.⁷⁶ For instance, WIPP shipments are barred from Colorado cities during weekday rush hours,⁷⁷ and state agen-

16(g)(1). States that disagree with an inadequacy determination by the Secretary may invoke the conflict resolution provisions of the 1981 DOE–New Mexico “consultation and cooperation” agreement. *Id.*

71. Sec. 16(d).

72. WIPP TRANSPORTATION PLAN, *supra* note 64.

73. WIPP TRANSPORTATION PLAN, *supra* note 64, at 1–2. The plan also reflects DOE Order 460.2, *Department Materials Transportation and Packaging Management*, and the DOE National Transportation Program’s *Program Manager’s Guide to Transportation Planning*. *Id.*

74. *Id.* at 2.

75. *Id.* at 4.

76. See, e.g., Midwestern Radioactive Materials Transportation Committee, *State Fees in the Midwest*, CSG MIDWEST, <http://www.csgmidwest.org/MRMTP/StateShip mentFees.aspx> (last updated July 29, 2010).

77. WIPP TRANSPORTATION PLAN, *supra* note 64, at 5.

cies must inspect and escort shipments through Illinois.⁷⁸ The *WIPP Transportation Plan* also includes voluntary, extra-regulatory measures that apply to the transportation of TRU waste to WIPP.

II. THE KEY PLAYERS IN WIPP TRANSPORTATION

The DOE and the states, through their regional organizations, lead the WIPP transportation program. The EPA, which inspects the DOE's waste characterization activities at the DOE sites that ship waste to WIPP, and which oversees the DOE's activities at WIPP itself, is not involved.⁷⁹ The DOE's Carlsbad office, formed as the Carlsbad Area Office in 1993, coordinates the DOE's national TRU waste disposal activities.⁸⁰ Elevated in status and renamed the Carlsbad Field Office in 2000, the office serves as "a focal point for all matters related to transuranic waste management" in the United States and offers interested parties an opportunity to participate in the DOE's decisions regarding the national TRU waste program.⁸¹

Three state regional organizations are actively involved with TRU waste shipments to WIPP because those shipments either originate within or cross their member states' jurisdictions en route to Carlsbad. The WGA, the SSEB, and the CSG Midwest have collaborated with the DOE on TRU waste transportation since the late 1980s, refining what is known as the "regional planning process."⁸² The process seeks to equip states

78. *Id.*

79. See OFFICE OF AIR AND RADIATION, U.S. ENVTL. PROTECTION AGENCY, IMPLEMENTATION OF THE WASTE ISOLATION PILOT PLANT LAND WITHDRAWAL ACT: FY 2004 REPORT TO CONGRESS, EPA 402-R-06-001 (Mar. 2006).

80. Carlsbad Field Office, U.S. Dep't of Energy, *Waste Isolation Pilot Plant: Carlsbad Field Office and Its Mission*, WASTE ISOLATION PILOT PLANT, <http://www.wipp.energy.gov/fctshts/cbfo.pdf> (last revised Jan. 2003).

81. *Id.* The CBFO's Office Manager reports to the DOE's Assistant Secretary for Environmental Management in Washington, D.C., and receives administrative support from the DOE's Albuquerque Operations Office. *Id.*

82. Lisa R. Sattler, CSG Midwestern Radioactive Materials Transportation Project, *Transportation Cooperation: Involving Corridor States in Decision Making Contributes to the Success of the DOE's Transportation Program*, RADWASTE SOLUTIONS MAG. (a publication of the American Nuclear Society), Mar./Apr. 2004, at 13, 14, available at <http://www.csghmidwest.org/About/MRMTP/PublicInformation/RadwasteSolutions0304.pdf> (last visited Aug. 21, 2010). The DOE's Office of Civilian Radioactive Waste Management (OCRWM) "put its transportation program on hold" and terminated the regional transportation cooperative agreements in 1998; however, the DOE's Office of Environmental Management took up the project to plan for the shipment of a wide range of radioactive wastes from former nuclear weapons production facilities. The OCRWM reinstated its cooperative agreements in 2003. *Id.* How-

with reliable information about waste shipments, involvement in planning, and financial assistance.⁸³ According to the CBFO, the regional organizations serve “[a]s regional voices for their respective governors,” and “state representatives present combined regional opinions and requests to the CBFO through the organizations.”⁸⁴

As WIPP’s host state, New Mexico also plays an important role in the WIPP transportation program, both within the WGA and as a result of its longtime cooperation with the DOE. In addition, Native American tribal governments whose lands are affected by WIPP shipments promote the safe transportation of waste to WIPP through a grant program managed by the CBFO.⁸⁵

A. WGA’s WIPP Transportation Technical Advisory Group

The WGA, which represents the governors of nineteen states and three U.S.-flag Pacific Islands, has a three-fold mission. It “addresses important policy and governance issues in the West, advances the role of the western states in the federal system, and strengthens the social and economic fabric of the region.”⁸⁶ The WGA’s strategic agenda often features energy issues.⁸⁷

ever, following a 2009 decision to halt work on the planned repository for such waste at Nevada’s Yucca Mountain, the DOE is no longer funding agreements to plan for shipments of high-level radioactive waste and commercial fuel. COUNCIL OF STATE GOV’TS E. REG’L CONF., 2010–11, at 16, *available at* <http://www.csgeast.org/about/ERC2010-2011.pdf>.

83. Sattler, *supra* note 82, at 13, 14.

84. WIPP TRANSPORTATION PLAN, *supra* note 64, at 4. Some of the regional organizations host separate committees or working groups for TRU waste and for other radioactive waste, because different requirements apply to the funds available for each type of waste through DOE cooperative agreements. *SSEB’s Committees Hold Joint Meeting—Will Remain Separate Entities*, SOUTHERN STATES ENERGY BOARD RADIOACTIVE WASTE NEWS AND PUBLICATIONS (SSEB Advisory Comm. on Radioactive Materials Transp., Norcross, Ga.), June 1996, at 1, *available at* <http://www.p2pays.org/ref/17/16499.pdf>.

85. Several other actors, including DOE contract carriers that transport waste to WIPP, DOE contractors that operate the WIPP site, and local governments, are also instrumental in the WIPP transportation program. However, a detailed examination of their roles is beyond the scope of this article, which emphasizes the federal-state interactions through the state regional organizations.

86. W. GOVERNORS’ ASS’N, WESTERN RENEWABLE ENERGY ZONES PROJECT SUMMARY (2009), *available at* http://www.westgov.org/component/joomdoc/doc_download/225-wrez-project-summary.

87. *Initiatives and Work Groups*, W. GOVERNORS’ ASS’N, <http://westgov.org/initiatives> (“WGA has a broad-based energy program that over the years has included the Clean and Diversified Energy Initiative, identification of Western Renewable En-

In 1989, the WGA used the funds provided by its cooperative agreement with the DOE to form the WIPP Transportation Technical Advisory Group (TAG). TAG now includes twelve members.⁸⁸ Its purpose “has been to work together toward resolving concerns among the states and disputes with DOE over the development and implementation of the transportation safety program for shipments to WIPP.”⁸⁹ With the DOE, TAG developed a *WIPP Transportation Safety Program Implementation Guide (WIPP Program Implementation Guide)*—“affectionately known as the PIG,” according to Anne Clark, who co-chairs TAG from New Mexico,⁹⁰—containing standards, principles, and procedures that the states and the DOE agreed to follow for truck shipments of TRU waste.⁹¹ Since 1992, the WGA has issued a series of policy resolutions on TRU waste transportation as well.⁹² In addition, the WGA and the DOE periodically have executed Memoranda of Agreement (MOA) to guide their collaboration on TRU waste transportation in the West through the regional-planning process.⁹³

ergy Zones, developing policies and best practices for energy efficient buildings, and deploying near-zero emission technologies for coal.”) (last visited Aug. 12, 2011).

88. They are: Arizona, California, Colorado, Idaho, Nebraska, Nevada, New Mexico, Oregon, Texas, Utah, Washington, and Wyoming. W. GOVERNORS’ ASS’N, WESTERN STATES COMMITTED TO RADIOACTIVE WASTE TRANSPORT SAFETY 1 (2008), available at <http://www.westgov.org/wga/initiatives/wipp/PIG-Web/Section%2011/WGA%20WIPP%20Fact%20Sheet.pdf>.

89. *WIPP Transportation Safety Program History*, W. GOVERNORS’ ASS’N, <http://www.westgov.org/component/content/article/102-initiatives/229-wga-wipp-transportation-safety-program-history> (last visited Aug. 12, 2011).

90. Interview with Anne deLain W. Clark, Coordinator, New Mexico Radioactive Waste Consultation Task Force, in Santa Fe, N.M. (Feb. 12, 2009).

91. See W. GOVERNORS’ ASS’N, WIPP TRANSPORTATION SAFETY PROGRAM IMPLEMENTATION GUIDE: INTRODUCTION (2008), available at <http://www.westgov.org/wga/initiatives/wipp/PIG-Web/Introduction/Introduction.pdf>.

92. *WIPP Transportation Safety Program Initiative*, W. GOVERNORS’ ASS’N, <http://westgov.org/radwaste> (last visited Aug. 30, 2011).

93. For example, the 2003 MOA was intended “to enhance the safety and security of the transport of transuranic waste shipments” in the West, “to facilitate communication” among the DOE, the CBFO, and the Western Governors on TRU waste transportation, to implement the WIPP LWA, and “to endorse the planning principles and transportation procedures” in the *WIPP Program Implementation Guide* and in the WGA’s cooperative agreement with the CBFO. 2003 Regional Protocol, *supra* note 59, at 1. The Western Governors and the DOE reaffirmed these commitments in a 2009 MOA. Memorandum Between the Western Governors and the U.S. Department of Energy, Regional Protocol for the Safe and Uneventful Transportation of Transuranic (TRU) Waste (June 15, 2009), available at http://www.westgov.org/component/joomdoc/doc_download/4-regional-protocol-for-the-safe-and-uneventful-transportation-of-transuranic-tru-waste [hereinafter 2009 Regional Protocol].

TAG's structure allows for flexibility. According to Clark, "[TAG] decided that it would make all of its official moves as an entity . . . on a pure consensus basis," rather than by voting.⁹⁴ Thus, if some WGA states wish to make a statement on an issue and others do not, the moving governors write a joint letter without suggesting that they represent the WGA.⁹⁵

B. SSEB TRU Waste Transportation Working Group

The SSEB, whose members include sixteen southern states, Puerto Rico, and the U.S. Virgin Islands, "enhances economic development and the quality of life in the South" through "innovations in energy and environmental policies, programs and technologies."⁹⁶ Current SSEB programs include *Radioactive Materials: Emergency Response and Transportation Planning*, which encompasses TRU waste transportation.⁹⁷

Since 1989, the SSEB Transuranic Waste Transportation Working Group (Working Group) has addressed states' planning for TRU waste shipments pursuant to a cooperative agreement sponsored by the DOE's CBFO.⁹⁸ The Working Group consists of state government representatives from fourteen states; they hail from state health, environmental, emergency management, and public safety agencies, and one state energy office.⁹⁹ It offers the DOE a regional perspective on TRU waste ship-

94. Interview with Anne deLain W. Clark, *supra* note 90.

95. *Id.*

96. *About Us: Mission Statement*, S. STATES ENERGY BD., <http://www.sseb.org/about-us.php> (last visited Aug. 21, 2010). The SSEB was formed in 1960 as the Southern Interstate Nuclear Board (SINB), but the Board formally expanded its mandate and activities in 1977 based on the southern governors' and legislators' needs. S. STATES ENERGY BD., *TRANSURANIC WASTE TRANSPORTATION HANDBOOK* ii (1994).

97. The program also addresses high-level radioactive waste transportation, foreign research-reactor spent nuclear fuel (which has been transported to the Savannah River Site in South Carolina), and the Southern Emergency Response Council. *Radioactive Materials: Emergency Response and Transportation Planning*, S. STATES ENERGY BD., <http://www.sseb.org/radioactive-materials.php> (last visited Aug. 21, 2010).

98. *Id.*

99. Member states are: Alabama, Arkansas, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. S. STATES ENERGY BD., *TRANSPORTATION PLANNING GUIDE FOR THE U.S. DEP'T OF ENERGY'S SHIPMENTS OF TRANSURANIC WASTE* (2009), available at <http://www.emcbc.doe.gov/WIPP/Documents/Document%20Library/Microsoft%20Word%20-%20SSEB%20WIPP%20Transportation%20Planning%20Guide%202009%20-%20Revised%2001-13-09%20%20-%20%20.pdf>; see also S. States Energy Bd., *Transuranic (TRU) Waste Transportation Working Group State Government Representatives* (2007) (copy on file with author). In the past, representatives of Indiana and Ohio also have participated in the Working Group because of their ties to the

ments.¹⁰⁰ In 1994, the SSEB issued a *Transuranic Waste Transportation Handbook*¹⁰¹ to provide background on WIPP shipments through the South, which are significant because four DOE sites in the eastern United States send or expect to send TRU waste to WIPP.¹⁰²

C. CSG Midwest: The Midwestern Radioactive Materials Transportation Project

SG Midwest (an arm of the CSG, which represents all three branches of government) and the DOE have collaborated on the Midwestern Radioactive Materials Transportation Project, a joint venture funded by cooperative agreements with the DOE since 1989. The project assists states in “learn[ing] about and provid[ing] input into the DOE’s plans for shipping radioactive materials through the region” and in facilitating the provision of federal financial assistance to those states on shipping routes.¹⁰³ It also supports the Midwestern Radioactive Materials Transportation Committee (Committee), which seeks “to identify, prioritize and work with [the DOE] to resolve regional issues related to the [DOE’s] transport of radioactive waste and materials, including spent nuclear fuel.”¹⁰⁴ Twelve states participate in the Committee.¹⁰⁵

The Committee initially focused on plans for future waste shipments managed by the DOE’s Office of Civilian Radioactive Waste Management, but since 1998, the Committee has worked with the DOE’s Environmental Management program on shipments of waste from former

southern transportation corridor. S. STATES ENERGY BD., ANNUAL REPORT 2000, at 17 (2000), available at <http://www.p2pays.org/ref/17/16491.pdf>.

100. See S. STATES ENERGY BD., ANNUAL REPORT 2010, at 11 (2010), available at http://www.sseb.org/downloads/MAC_DoNotDelete/SSEBAnnualReport2010.pdf.

101. S. STATES ENERGY BD., TRANSURANIC WASTE TRANSPORTATION HANDBOOK (1994).

102. The sites include Oak Ridge National Laboratory in Tennessee and the Savannah River Site in South Carolina. S. STATES ENERGY BD., ANNUAL REPORT 2010, *supra* note 100, at 11; see SOUTHERN STATES ENERGY BOARD, TRANSURANIC WASTE TRANSPORTATION HANDBOOK ix (1994).

103. *Midwestern Radioactive Materials Transportation Project*, THE COUNCIL OF STATE GOV’TS MIDWESTERN OFFICE, <http://www.csamidwest.org/About/MRMTP.htm> (last visited Aug. 21, 2010).

104. *Midwestern Radioactive Materials Transportation Committee*, THE COUNCIL OF STATE GOV’TS MIDWESTERN OFFICE, http://www.csamidwest.org/MRMTP/MRMTP_committee.aspx (last visited Aug. 21, 2010).

105. They are: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. They are represented by members of their executive agencies and by state legislators. *Id.*

defense plants, including several shipping campaigns for TRU waste.¹⁰⁶ The CSG Midwest issued a *Handbook of Radioactive Waste Transportation* in 2005.¹⁰⁷ The *Handbook* describes the states' collaborative, regional approach to planning and provides information about the shipping campaigns that have affected or will affect the Midwest, including a campaign that has moved TRU waste out of four midwestern facilities.¹⁰⁸ The CSG Midwest and the Midwestern Radioactive Materials Transportation Committee also developed a *Planning Guide for Shipments of Radioactive Materials Through the Midwestern States*.¹⁰⁹

D. CSG Eastern Office: The Northeast High-Level Radioactive Waste Transportation Project

The CSG/ERC established the Northeast High-Level Radioactive Waste Transportation Project in 1994.¹¹⁰ Funded through cooperative agreements with the DOE, the project seeks to engage state officials, stakeholders, and the public in the Northeast on issues relating to federal radioactive waste transportation policies.¹¹¹ The project staffs the Northeast High-Level Radioactive Waste Transportation Task Force, a working group of executive agency officials from ten northeastern states, that works on regional issues involving the transportation of high-level radioactive waste, TRU waste, and spent nuclear fuel from federal research and defense facilities and commercial nuclear power plants.¹¹² Through consultation with the DOE and other federal agencies, representatives of

106. *Id.*; see also THE COUNCIL OF STATE GOV'TS MIDWESTERN OFFICE & THE MIDWESTERN RADIOACTIVE MATERIALS TRANSP. COMM., PLANNING GUIDE FOR SHIPMENTS OF RADIOACTIVE MATERIALS THROUGH THE MIDWESTERN STATES (2009), available at http://www.csamidwest.org/MRMTP/documents/MRMTP_Planing_Guide.pdf [hereinafter CSG MIDWEST PLANNING GUIDE].

107. THE COUNCIL OF STATE GOVERNMENTS MIDWESTERN OFFICE, HANDBOOK OF RADIOACTIVE WASTE TRANSPORTATION (2005), available at <http://www.csamidwest.org/MRMTP/documents/HandbookofRadioactiveWaste.pdf>.

108. *Id.*

109. Last revised in 2009, the *Planning Guide* outlines the midwestern states' preferred best practices for shipping radioactive materials in order to provide shippers with a one-stop source of information and to improve transportation efficiency. CSG MIDWEST PLANNING GUIDE, *supra* note 106.

110. Testimony of Cort Richardson, Director, CSG-ERC Northeast High-Level Radioactive Waste Transportation Project, before the Blue Ribbon Commission on America's Nuclear Future Transportation and Storage Subcommittee 1 (Aug. 10, 2010), available at http://www.brc.gov/sites/default/files/meetings/presentations/richardson_brc_subcommittee_testimony_8-10-10.pdf.

111. *Id.*

112. *Id.* The states on this task force are the six New England states plus Delaware, New Jersey, New York, and Pennsylvania.

tribes, industry, states throughout the United States, and others, this task force and the project jointly plan for radioactive waste shipment campaigns that address issues in ways that meet the needs of the Northeast and other regions.¹¹³

Spent nuclear fuel from commercial nuclear power plants is prevalent in the Northeast and therefore was a focus of this task force's work until the Obama administration's 2009 decision to halt work on the national Yucca Mountain repository in Nevada effectively ended the DOE's collaboration with states to plan for the transportation of commercial spent nuclear fuel.¹¹⁴ Beginning in 2011 or 2012, however, three DOE "small quantity" sites in the Northeast will ship TRU waste to Idaho National Laboratory for treatment and characterization prior to shipment to WIPP.¹¹⁵ Accordingly, the CSG/ERC has a connection to the WIPP transportation program, although it has been less involved than the other state regional organizations that participate.

E. Carlsbad Field Office Tribal Program

WIPP shipments cross ten Native American reservations in six states, and the DOE's CBFO Tribal Program provides financial and technical assistance and emergency preparedness training to Native American tribes along the WIPP route.¹¹⁶ The CBFO offers cooperative, government-to-government agreements to each tribe on an individual basis.¹¹⁷ In 2009, the CBFO maintained cooperative agreements with ten tribes.¹¹⁸ The CBFO provided most of these tribes with \$50,000 annually and pro-

113. *Id.* at 1–2. *Northeast High-Level Radioactive Waste Transportation Project*, COUNCIL OF STATE GOV'TS E. REG'L CONFERENCE, <http://www.sseb.org/wp-content/uploads/2010/05/Richardson-Cort.pdf> (last visited Sept. 9, 2011) (presentation by Cort Richardson, Director, at the KEMA Emergency Management Conference, Lancaster, PA, Sept. 12, 2010).

114. COUNCIL OF STATE GOV'TS E. REG'L CONFERENCE, *supra* note 82, at 16; *see* Testimony of Cort Richardson, *supra* note 110.

115. CSG EASTERN REGIONAL CONFERENCE, NORTHEAST HIGH-LEVEL RADIOACTIVE WASTE TRANSPORTATION PROJECT SPRING MEETING NOTES (2008), at 3. The sites are the Knolls Atomic Power Laboratory and Separations Process Research Unit (SPRU) in Schenectady, New York, and the Bettis Atomic Power Laboratory in West Mifflin, Pennsylvania. *Id.*

116. *Carlsbad Field Office Tribal Program*, WASTE ISOLATION PILOT PLANT, <http://www.wipp.energy.gov/TribalProgram.htm> (last visited May 22, 2011).

117. *Id.*

118. Most are located in New Mexico, but some of the tribes' reservations are in Oregon, Washington, Nevada, California, Arizona, Utah, and Idaho. *See* e-mail from Roger Nelson, Chief Scientist and Public Information Officer, Carlsbad Field Off., U.S. Dep't of Energy, to the author (Feb. 9, 2009) (on file with author).

vided two of the larger tribes with \$75,000 annually for use in planning for transportation-related emergencies involving TRU waste.¹¹⁹

Each cooperative agreement contains the same scope of work.¹²⁰ Many tribal commitments involve coordinating with local and state officials on emergency-planning activities and making efforts to publicize hazards and risk reduction measures.¹²¹ The cooperative agreement also contains linkages between tribes' WIPP transportation activities and broader homeland security initiatives.¹²² For example, each tribe agrees to participate in a homeland security grant program and to continue WIPP/Hazmat/WMD training programs that include a weapons of mass destruction component.¹²³

According to Roger Nelson, "[t]he cooperative agreements with tribes are primarily related to the perceived impacts of shipments of TRU waste to WIPP that pass through tribal lands," and "[f]or the most part, DOE has entered into these cooperative agreements with tribes as an effort to enhance transparency and openness, not because there is a regulatory requirement."¹²⁴ To this end, the DOE maintains that its cooperative agreements with tribes "serve as two-way conduits, promoting participation in DOE's decision-making relating to transuranic waste transportation activities" as the DOE shares information with the tribes and they share information with the DOE.¹²⁵

F. New Mexico Radioactive Waste Consultation Task Force and WIPP Working Group

New Mexico continues to play an important role in TRU waste transportation aside from its participation in the WGA's WIPP TAG. Under the WIPP LWA, New Mexico receives federal assistance directly from the DOE, instead of through the WGA.¹²⁶ In 1979, the New Mexico Legislature initiated the state's formal planning for a possible WIPP by establishing the Radioactive Waste Consultation Task Force (Task Force),¹²⁷ which comprises cabinet secretaries charged with representing

119. *Id.*

120. *Id.*

121. PUEBLO ACTING EMERGENCY MGMT. COORDINATOR, FY 2004 STATEMENT OF WORK (redacted copy provided by DOE on file with author).

122. *Id.*

123. *Id.*

124. E-mail from Roger Nelson, *supra* note 119.

125. *Carlsbad Field Office Tribal Program*, *supra* note 116.

126. Pub. L. No. 102-579, § 15, 106 Stat. 4777, 4791 (1992).

127. Clark & Ottmer, *supra* note 15, at 2.

the state's interests "regarding the safe and uneventful transportation of nuclear waste in and through the state."¹²⁸

The chair of the Task Force serves as the state's principal representative responsible for interacting with the DOE in the consultation and cooperation process.¹²⁹ The Task Force is a policy-advising body, not a decision-making body; in the end, it makes recommendations to the governor and/or the individual cabinet secretaries, each of whom has its own decision-making authority.¹³⁰

The coordinator of the Task Force oversees the New Mexico WIPP Transportation Safety Program and a WIPP Working Group comprising dedicated staff from the seven state agencies in the Task Force.¹³¹ Anne Clark, coordinator since 2001, said that it is her impression that "as the host state, . . . it was really important to have the most comprehensive program," with agencies bringing different expertise, as well as responsibilities, to the WIPP Transportation Program.¹³² The coordinator convenes quarterly "consultation and cooperation" meetings on WIPP in four rotating locations throughout the state.¹³³

128. *WIPP Transportation Safety Program*, N.M. ENERGY, MINERALS AND NAT. RESOURCES DEP'T, <http://www.emnrd.state.nm.us/WIPP/Index.htm> (last visited Aug. 22, 2010). The Task Force members are the cabinet secretaries of the New Mexico departments of Energy, Minerals and Natural Resources (EMNRD); Health; Environment; Public Safety; Transportation; and Homeland Security and Emergency Management, plus the State Fire Marshall's Office. Leaders of the joint interim legislative Radioactive and Hazardous Materials Committee serve as advisory members. *The Radioactive Waste Consultation Task Force*, N.M. ENERGY, MINERALS AND NAT. RESOURCES DEP'T, <http://www.emnrd.state.nm.us/Wipp/TaskForce.htm> (last visited Aug. 22, 2010).

129. Agreement for Consultation and Cooperation, *supra* note 34, art. IV, ¶ A; *The Radioactive Waste Consultation Task Force*, *supra* note 128.

130. *The Radioactive Waste Consultation Task Force*, *supra* note 128; Interview with Anne deLain W. Clark, *supra* note 90.

131. *The Radioactive Waste Consultation Task Force*, *supra* note 128. The coordinator serves as the EMNRD secretary's designee on radioactive waste transportation and WIPP policy in New Mexico, with the exception of permitting of the repository itself. *Id.*

132. Interview with Anne deLain W. Clark, *supra* note 90.

133. Clark & Ottmer, *supra* note 15, at 5–6. The Coordinator also co-chairs the WGA Technical Advisory Group on WIPP with the representative from Idaho and serves as New Mexico's liaison to other regional radioactive waste groups. *WIPP Working Group*, N.M. ENERGY, MINERALS AND NAT. RESOURCES DEP'T, <http://www.emnrd.state.nm.us/WIPP/WIPPWorkingGroup.htm> (last visited Aug. 12, 2011).

III. COLLABORATION IN THE WIPP TRANSPORTATION PROGRAM

This Part reviews states' motivations for collaborating in the WIPP transportation program, key functions that the state regional organizations perform in the program, outcomes to date (including successes and criticisms), and challenges ahead. It illustrates the value of collaboration in the WIPP transportation program to the participants and to others. More importantly, it illuminates the ingredients of the WIPP transportation program that have the potential to foster collaboration on other issues or in other contexts.

A. States' Motivations for Collaborating

States appear to have many reasons for collaborating through regional organizations on the transportation of TRU waste destined for WIPP. First and foremost, collaboration is essential as a practical matter. "[T]he fact that . . . the route goes through so many different states . . . forces cooperation," said Jennifer A. Salisbury. "You just have to figure out a way to work together or the trucks will be stopped at everybody's border."¹³⁴ Indeed, the WGA cites, "[t]he potential risks of transuranic waste and the complexities of transporting this waste to WIPP" as one reason why the western states, the DOE, and the DOT joined together in 1988 to plan for "safe and uneventful transportation."¹³⁵

Particularly in the West, where more than 90 percent of the DOE's original inventory of TRU waste was located,¹³⁶ states have another powerful incentive for helping to facilitate the transportation of TRU waste to WIPP—namely, getting the waste out of their states. According to Alex Schroeder, program director for the WGA, some states originally "had a vested interest in getting the transportation program going" because they wanted to move TRU waste out of their states as the DOE was beginning to clean-up sites around the nuclear weapons complex.¹³⁷ The WGA continues to cite the environmental cleanup of DOE defense-related facili-

134. Interview with Alex Schroeder, Program Director, WGA, and Jennifer A. Salisbury, Consultant to the WGA and Former Cabinet Secretary, N.M. Energy, Minerals & Nat. Resources Dep't, in Washington, D.C. (Feb. 4, 2009).

135. 2003 Regional Protocol, *supra* note 59, at 2.

136. *WIPP Transportation Safety Program History*, *supra* note 89.

137. Interview with Alex Schroeder and Jennifer A. Salisbury, *supra* note 134.

ties and national laboratories as among the motivations for the West in TRU waste transportation.¹³⁸

The state regional organizations also offer a forum in which states can articulate policy positions that some individual states may hesitate to voice on their own. In this sense, collaboration offers states a measure of safety in numbers. As two state officials active in the WGA's WIPP transportation program wrote, "[by] joining in regional organizations, individual states gain the strength they need to stand up for states' rights in the transportation of radioactive waste."¹³⁹ The regional scale is functional because it enables states with similar interests to forge consensus without glossing over significant differences between regions that could lead to conflict if they were addressed at a national level.¹⁴⁰ Important differences stem from whether states are home to DOE facilities that store radioactive waste pending its transportation to WIPP or another permanent disposal site or whether they are "pass through" states on the WIPP route.¹⁴¹

In addition, collaboration offers states an opportunity to shape national policy more effectively than any single state could on its own. Many states engaged in the transportation of TRU waste to WIPP hope to influence national policy on the transportation of spent nuclear fuel and high-level radioactive waste generated at nuclear power plants.¹⁴² Recently, for example, the WGA raised this point in a letter to the co-chairs of the Blue Ribbon Commission on America's Nuclear Future.¹⁴³ The WGA asserted that given the western states' experience working with the

138. WGA RADIOACTIVE WASTE TRANSPORTATION PROGRAM (ISSUE BRIEF), *supra* note 92, at 1.

139. Clark & Ottmer, *supra* note 15, at 1.

140. Lisa Janairo, Sarah Wochos, Cort Richardson & Melissa Bailey, *Waste Not, Want Not . . . Waste*, STATE NEWS, Oct. 2007, at 9, 12, *available at* http://www.csg.org/pubs/statenews/statenews_archive/statenews_archive_pdfs/sn_2007/sn0710.pdf.

141. For instance, the midwestern states "place equal emphasis on having DOE remove their waste and having substantive involvement in planning and overseeing shipping campaigns," whereas the northeastern states place a greater priority on "getting rid of the accumulated waste." *Id.*; *see also* Interview with Anne deLain W. Clark, *supra* note 90 (describing the different interests states have based on the level of waste present in their state).

142. Letter from Brian Schweitzer, Governor of Montana and Chairman, WGA, and C.L. "Butch" Otter, Governor of Idaho and Vice Chairman, WGA, to Steven Chu, Secretary of Energy, DOE, at 1 (May 24, 2010), *available at* http://www.westgov.org/component/joomdoc/doc_download/1242-blue-ribbon-commission-on-americas-nuclear-future [hereinafter Schweitzer and Otter Letter dated May 24, 2010].

143. *Id.* The DOE convened the commission at President Barack Obama's request in early 2010 "to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle, including all alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel, high-level waste, and materials de-

DOE on issues related to WIPP, Yucca Mountain, and other DOE sites, “[w]estern states are arguably the best source of insight into the intergovernmental and local consideration of policy choices for the safe and effective transportation, storage, and disposal of spent nuclear fuel (SNF) and high-level waste (HLW).”¹⁴⁴

Collaboration also can facilitate states’ outreach by boosting public confidence in TRU waste transportation, to the extent the public takes comfort in knowing that several states agree on an approach.¹⁴⁵ In fact, fear of the state’s incapacity to respond to a radiological emergency, doubt in the federal government’s ability to effectively respond to such an emergency, and a lack of public confidence in the DOE’s self-regulation of TRU waste, motivated New Mexico to get involved in planning for WIPP in the late 1970s.¹⁴⁶ The state’s concern that the transportation of nuclear waste to WIPP would “impose a serious financial burden” on the state in the area of emergency response capability and preparedness was another motivating factor.¹⁴⁷ Similar concerns likely motivated other states to become involved in TRU waste transportation as well.

By making expectations clear, states’ collaboration provides certainty for shippers and other private actors and, in turn, can reduce the likelihood of public opposition to shipments of TRU waste into their home states.¹⁴⁸ Other benefits to states include the ability to share information with one another and to learn from other states’ experiences.¹⁴⁹ States also may realize economies of scale in technical expertise or resources used to develop guidance or other materials by collaborating.¹⁵⁰

rived from nuclear activities.” *Charter*, BLUE RIBBON COMM’N ON AMERICA’S NUCLEAR FUTURE, <http://brc.gov/index.php?q=page/charter> (last visited Aug. 22, 2010).

144. Schweitzer and Otter Letter dated May 24, 2010, *supra* note 142, at 1. Noting that the commission lacked representatives from state government, the letter urged the Secretary of Energy to provide for state government participation and expressed the western states’ willingness to participate in several specific ways. *Id.* at 1, 3.

145. Interview with Alex Schroeder and Jennifer A. Salisbury, *supra* note 134.

146. Supplemental Stipulated Agreement, *supra* note 43, at 18.

147. *Id.* at 11–12 (summarizing the state’s concerns about emergency preparedness and response).

148. CSG MIDWEST PLANNING GUIDE, *supra* note 106, at 4.

149. Janairo et al., *supra* note 140, at 12.

150. Cf. Jonathan H. Adler, *When Is Two a Crowd? The Impact of Federal Action on State Environmental Regulation*, 31 HARV. ENVTL. L. REV. 67, 93 (2007) (noting that economies of scale for certain scientific research may strengthen the ability of federal efforts to facilitate state-level regulation).

B. Functions of the State Regional Organizations, States, and Tribes

A review of the WIPP transportation program highlights several important functions of the regional organizations, the states, and the tribes in program implementation.¹⁵¹ First, the state regional organizations generally administer federal grants that the DOE provides to states to support their activities relating to the transportation of waste to WIPP.¹⁵² Pursuant to the WIPP LWA, the CBFO provides funds to states indirectly through state regional organizations, directly to individual states such as New Mexico, and directly to tribal governments. Each state's regional organization has created funding mechanisms with its member states.¹⁵³

The state regional organizations also work closely with their member states to plan for WIPP shipments.¹⁵⁴ For instance, the state regional organizations, states, and tribes participate in the development of the DOE's carrier contract requirements for WIPP shipments, and the CBFO seeks their input during the contractor selection process.¹⁵⁵ States, state regional organizations, and tribes are all involved in selecting WIPP routes and in monitoring conditions and shipments along those routes.¹⁵⁶ States and tribes are also involved in scheduling WIPP shipments.¹⁵⁷ Fur-

151. This analysis is based on the *WIPP Transportation Plan*, WGA, SSEB, and CSG Midwest documents, correspondence between the state regional organizations and the DOE, and interviews with state officials. It may not be exhaustive, but it captures the principal results of the states' collaboration on WIPP.

152. See Janairo et al., *supra* note 140, at 12 (stating that the "CSG has facilitated the states' receipt of this [WIPP-related] financial assistance in the Midwest and will do the same for states in the Northeast").

153. WIPP TRANSPORTATION PLAN, *supra* note 64, at 4. Similarly, members of the SSEB "work with SSEB to develop their state work plans and budgets for transuranic waste campaigns that traverse the southern region," and SSEB staff monitor the states' use of funds for the WIPP transportation program. DOE-CFO/SSEB Cooperative Agreement, Scope of Work: July 1, 2008, through June 30, 2009, at 1-2 (copy from SSEB on file with author).

154. See, e.g., Janairo et al., *supra* note 140, at 10 (describing a planning role for both the Midwestern Radioactive Materials Transportation Project and the Northeast High-Level Radioactive Waste Transportation Project, which help state officials by "organizing regional committees to work on planning for both current and future shipments").

155. WIPP TRANSPORTATION PLAN, *supra* note 64, at 15.

156. *Id.* at 14 (stating that "[b]efore TRU waste from a given location will be shipped to WIPP or under CBFO control between sites, the CBFO Institutional Affairs Manager, working in cooperation with the affected DOE sites, states (or regional state organizations), and tribes, will coordinate with communities along the route," in part to provide training for "public safety officials and other emergency responders and to implement public information programs"); see also *id.* at 12 (describing states' tracking of shipments).

157. *Id.* at 6-7, 11-12.

ther, states and tribes have important responsibilities during WIPP shipments. They are responsible for the health and safety of their residents and for the local environment, and they serve as the DOE's principal contacts, even where local agencies may be first responders.¹⁵⁸ States and tribes are also involved in voluntary inspections of WIPP shipments that exceed legal requirements.¹⁵⁹

In addition, the state regional organizations facilitate the sharing of information among member states and other regional organizations by holding regular meetings, preparing written materials, and interacting on an informal basis. The SSEB's Transuranic Waste Transportation Working Group, for example, is to meet twice yearly to discuss the TRU waste transportation activities of the DOE and other agencies and organizations; the CBFO is to attend at least one Working Group meeting.¹⁶⁰ The SSEB participates in related meetings, such as those of the WGA's TAG on WIPP transportation, prepares issue briefs for Working Group members, and reports to them on the TRU waste activities of other groups.¹⁶¹

The state regional organizations share concerns and ideas with one another as well. The WGA, which has worked with the SSEB for years, recently has been working with CSG Midwest on WIPP shipments.¹⁶² The WGA also works with affiliated and related organizations.¹⁶³

In addition, the state regional organizations share information by developing and updating documents to guide the implementation of the WIPP transportation program. The WGA, the western states, and the CBFO periodically review the *WIPP Program Implementation Guide* and

158. *Id.* at 12.

159. States that are home to contract carriers conduct compliance audits of those carriers and report any audit deficiencies and recommendations for correcting them to the CBFO and to other states and tribes. *Id.* at 10. States and tribes may also use voluntary enhanced standards developed by the private Commercial Vehicle Safety Alliance (CVSA) to inspect WIPP shipments. *Id.* at 12. The *WIPP Transportation Plan* requires compliance with the CVSA's "Enhanced North American Inspection Standards Level VI" requirements, and "[o]rigin and destination states may inspect the shipment prior to dispatch or upon arrival at the destination," and "[s]tates and tribes en route may elect to inspect the shipment . . . or may elect to honor the CVSA inspection decal and not inspect the unit." *Id.* at 6, 12.

160. DOE-CFO/SSEB Cooperative Agreement, *supra* note 153, at 1–2.

161. *Id.* at 3. Likewise, both the Midwestern Radioactive Materials Transportation Project and the Northeast High-Level Radioactive Waste Transportation Project play an informational role focused on keeping state officials apprised of ongoing shipments. Janairo et al., *supra* note 140, at 10.

162. Interview with Alex Schroeder and Jennifer A. Salisbury, *supra* note 134.

163. *Program Highlights*, W. GOVERNORS' ASS'N, <http://www.westgov.org> (last visited Aug. 22, 2010); see Schweitzer and Otter Letter dated May 24, 2010, *supra* note 142, at 1.

the *WIPP Transportation Plan* to ensure that the documents continue to meet the intended objectives.¹⁶⁴ Similarly, the SSEB commits to prepare updates of its *Transuranic Waste Transportation Handbook* for CBFO review and concurrence before they are distributed to the DOE, the states, and other stakeholders.¹⁶⁵ The state regional organizations are also prepared to develop guidance on emerging or new issues.¹⁶⁶

The state regional organizations also funnel information from the states to the DOE, both on an informal basis and by submitting formal policy positions. For instance, the Midwestern High-Level Radioactive Waste Committee has met with the DOE twice a year since 1990, exchanging information, discussing and commenting on the DOE's transportation-related policies and programs, and making recommendations for transporting spent nuclear fuel and high-level radioactive waste.¹⁶⁷ The state regional organizations bring common concerns from the implementation of radioactive waste transportation programs to the DOE's attention as well. For example, after a joint meeting in 2001, the midwestern, northeastern, and southern regions asked the DOE to expedite the implementation of transportation protocols that the DOE had developed with states, tribes, and other stakeholders.¹⁶⁸ Likewise, in 2003, the CSG Midwest wrote to the DOE's CBFO to express concern that the eight-week rolling schedules of WIPP shipments appeared to contain "placeholder" shipping dates, rather than firm dates.¹⁶⁹ This practice hin-

164. 2003 Regional Protocol, *supra* note 59, at 2. The WGA and the CBFO "negotiate and concur on changes to the 'WIPP Guide,' which are then incorporated into the 'WIPP Transportation Plan.'" *Id.*

165. DOE-CFO/SSEB Cooperative Agreement, *supra* note 153, at 3–5.

166. For example, when the DOE was planning to ship some TRU waste to WIPP by rail, the WGA's WIPP Transportation Technical Advisory Group began drafting a Rail Transportation Program Implementation Guide similar to that used for truck shipments. WGA RADIOACTIVE WASTE TRANSPORTATION PROGRAM (ISSUE BRIEF), *supra* note 92, at 2.

167. Sattler, *supra* note 82, at 14. Similarly, the "SSEB will coordinate with its working group members to convey state concerns to DOE and resolve regional transportation issues relating to accident prevention and emergency response preparedness." DOE-CFO/SSEB Cooperative Agreement, *supra* note 153, at 1.

168. The states praised the work of the DOE's National Transportation Program (NTP) in particular, but said that all three regions had observed, in planning for eight shipping campaigns involving TRU waste and spent nuclear fuel, that "good resources—such as transportation plans and public information materials developed with the states—were available but were not utilized by the programs." Letter from Frank H. Moussa to Spencer Abraham, *supra* note 14, at 2.

169. Letter from Timothy A. Runyon, Chair, CSG Midwestern Radioactive Materials Transportation Committee, to Dr. Inés R. Triay, Manager, Carlsbad Field Office,

dered states' ability to make necessary resources available for tracking, inspecting, and accompanying shipments.¹⁷⁰

The state regional organizations also work together to bring emerging national issues to the DOE's attention. In a 1998 letter, five cooperative agreement groups expressed concern about the privatization of radioactive waste transportation programs, urging the DOE to "maintain control over transportation institutional programs" without delegating them to a private contractor.¹⁷¹ In addition, the states urged the DOE *not* to delegate responsibilities, such as its interactions with states, tribes, and local governments on shipping campaigns and transportation issues.¹⁷² Three months after September 11, 2001, the Midwestern, Northeastern, and Southern regions sent a letter to the Secretary of Energy recognizing that increased attention to security would bring changes to many aspects of life in the United States but also expressing hope that the states' "co-operative relationship with the Department" would endure.¹⁷³ The states added that "given the heightened emphasis on security, it will be more important than ever for us to share information and work together to make sure that shipments are conducted in a safe and secure manner."¹⁷⁴ The states then expressed hope for finding "a balance between planning cooperatively and ensuring homeland security."¹⁷⁵

At times, the state regional organizations convey the states' policy positions not only to the DOE but also to others in the federal government. For example, the WGA's policy resolution on TRU waste includes a management directive stating that the "WGA shall convey this resolution to the appropriate members and committees of the U.S. Congress, the Secretaries of Energy and Transportation, the Chairman of the U.S.

U.S. DOE (Sept. 22, 2003), at 1–2, *available at* <http://www.csgmidwest.org/MRMTP/documents/WIPPSep2003.pdf>.

170. *Id.* In response, the DOE adopted a policy of no changes to the eight-week rolling schedules. Letter from Dr. Inés R. Triay, Manager, CBFO, U.S. DOE, to Timothy Runyon, Chair, CSG Midwest (Oct. 10, 2003), *available at* <http://www.csgmidwest.org/MRMTP/documents/WIPPSep2003doerresponse.pdf>.

171. Letter from Ken Niles, Oregon Office of Energy, Co-Chair, WIEB High-Level Radioactive Waste Committee, et al., to Frederico Peña, Secretary, DOE, at 2 (Mar. 3, 1998), *available at* http://www.csgmidwest.org/About/MRMTP/PublicInformation/Issue%20Archive/References/Niles_Letter_Frederico_Pena.pdf.

172. *Id.*

173. Letter from Frank H. Moussa to Spencer Abraham, *supra* note 14, at 3.

174. *Id.*

175. *Id.*

Nuclear Regulatory Commission (NRC), and the Administrator of the EPA.”¹⁷⁶

Furthermore, the state regional organizations work to educate governors, state legislators, other politicians, and the public about the transportation of TRU and other radioactive wastes. Recognizing that “the success or failure of the WIPP shipment campaign depends in large part on . . . an informed group of legislators,” the SSEB planned in 2008 to have its staff attend meetings of the National Conference of State Legislatures and the Southern Governors’ Association to brief elected officials and their staffs on the SSEB’s activities regarding TRU waste.¹⁷⁷ Sharing information about the transportation of radioactive waste with midwestern state officials and the general public is also a “key component” of the Midwestern Radioactive Materials Transportation Project.¹⁷⁸

The state regional organizations also provide public information about the WIPP transportation program. Under its cooperative agreement with the DOE, the SSEB will “[m]aintain[] an information clearinghouse of periodicals, newsletters, audio and video tapes, and other research materials” to share with state and local officials and others.¹⁷⁹ Most of the WGA’s public interaction involving the WIPP transportation program occurs when new routes are opening and there are “road shows” featuring a WIPP truck displaying a waste package and a question-and-answer session with public officials.¹⁸⁰ The state regional organizations also meet twice a year with industry and tribal stakeholders, as DOE’s Transportation External Coordination Working Group, to ensure that national issues are discussed and negotiated by all interested parties.¹⁸¹ Furthermore, “[e]ach state has the lead responsibility for communication with local officials, the public, and the news media in its own state about the WIPP transportation safety program,” and each state is obligated to “inform the other partners in the communications program as to major communication activities planned within each state.”¹⁸²

176. Western Governors’ Ass’n Pol’y Resol. 09-4, U.S. Dep’t of Energy Waste Isolation Pilot Plant (WIPP) and Transportation of Transuranic (TRU) Waste, § C, ¶ 1 (2009) [hereinafter WGA Pol’y Resol. 09-4].

177. DOE-CFO/SSEB Cooperative Agreement, *supra* note 153, at 5–6.

178. CSG Midwest publishes documents on the subject, includes relevant articles in its monthly newsletter, and makes its publications available through its website. *Midwestern Radioactive Materials Transportation Project*, *supra* note 103.

179. DOE-CFO/SSEB Cooperative Agreement, *supra* note 153, at 7.

180. Interview with Alex Schroeder and Jennifer A. Salisbury, *supra* note 134.

181. Clark & Ottmer, *supra* note 15, at 5.

182. WIPP TRANSPORTATION PLAN, *supra* note 64, at 13. Tribes have the same responsibilities in their respective jurisdictions. *Id.*

Finally, the state regional organizations engaged in TRU waste transportation speak out on other national radioactive waste policy issues. The WGA has used its policy resolutions to lay out its expectations of the DOE. For example, WGA policy positions reiterate that the DOE must continue to comply with the requirements of the WIPP LWA, the EPA's disposal standards, and the WIPP compliance criteria,¹⁸³ and must "ensure timely and adequate funding of all aspects of the WIPP Transportation Safety Program."¹⁸⁴

Through its committee, the CSG Midwest compiles recommendations on federal waste transportation policy beyond WIPP, often collaborating with states in other regions to present a unified position. For instance, when the DOE supported legislation in 2006 and 2007 that would have preempted state transportation laws for shipments to a national repository, the Midwestern states and states in other regions unanimously opposed the legislative proposals.¹⁸⁵

Not surprisingly, different state regional organizations may advocate different policy positions at the national level on certain issues. Whether WIPP should be expanded is one issue that is likely to generate divergent views. The National Conference of State Legislatures (NCSL) has recommended amending the WIPP LWA "to accommodate a larger volume and activity of waste."¹⁸⁶ It is unlikely that the WGA, whose members include New Mexico and other states that are closely affected by waste transportation to WIPP, will adopt this position.

C. Outcomes to Date

At this point, the WIPP transportation program has seen its share of successes and accomplishments. However, the program has been criti-

183. 40 C.F.R. §§ 191, 194 (2010) (setting forth the disposal standards and the WIPP compliance criteria).

184. WGA Pol'y Resol. 09-4, *supra* note 176, § B, ¶ 2(d). In addition, the policy positions assert that "the DOE must ensure timely and adequate funding to TRU waste characterization/certification activities at DOE sites in order to facilitate the timely, efficient cleanup of the U.S. nuclear weapons complex." *Id.* § B, ¶ 2(c).

185. Office of Civilian Radioactive Waste Management, *Shipment Planning: Priority Issues for the Midwestern States*, CSG MIDWEST (last updated Sept. 2, 2008), <http://www.csgmidwest.org/About/MRMTP/ShipmentPlanning/OCRWM/OCRWMKeyIssues.htm> (archived Web page last visited Dec. 29, 2008, on file with author). The midwestern states also urged the DOE's OCRWM to recognize that its advocacy of preemption of state laws would damage the cooperative relationships with states that the OCRWM has built over the years. *Id.*

186. *State-Federal Relations and Standing Committees: Environment Standing Committee*, NAT'L CONFERENCE OF STATE LEGISLATURES, <http://www.ncsl.org/default.aspx?TabID=773&tabs=855,23,667> (last visited Aug. 12, 2011).

cized for shortcomings such as the proximity of its truck routes to communities, its emergency preparedness, and the DOE's interactions with states along the truck routes in connection with disruptions such as weather warnings and construction.

1. Successes and Accomplishments

The DOE and the state regional organizations report that the WIPP transportation program has been a huge success. In a WGA press release marking the ten-year anniversary of WIPP's receipt of the first TRU waste for disposal, Idaho Governor Butch Otter, who led the TRU waste transportation program with New Mexico's then-governor, Bill Richardson, based the program's "excellent safety record" on the more than 7,200 TRU waste shipments that traveled more than 8.5 million miles en route to WIPP.¹⁸⁷ In November 2007, the DOE reported that WIPP had received 6,231 shipments of contact-handled TRU waste and eighty-seven shipments of more highly radioactive remote-handled TRU waste, and that transportation of over seven million loaded miles had occurred without any material release.¹⁸⁸ While some mechanical problems and traffic accidents had occurred, none led to serious driver injuries or deaths, according to the DOE.¹⁸⁹ According to the WGA's website, "[q]uality control reviews conducted every other year on the program's effectiveness have concluded that the [WGA's *WIPP Program Implementation Guide*] has been fully implemented" and that "all the waste shipped has been safely buried."¹⁹⁰ The safety record of the WIPP transportation program is believed to help build public confidence.¹⁹¹

Even frequent critics of WIPP commend the WIPP transportation program. When asked about the program, Don Hancock of the Southwest Research and Information Center in Albuquerque, New Mexico,

187. Press Release, Western Governors' Ass'n, Western Governors Applaud 10 Years of Safe, Uneventful Shipments to WIPP (Mar. 26, 2009), available at <http://www.westgov.org/component/content/article/78/65>.

188. SSEB Radioactive Materials Transportation Committee and Transuranic Waste Transportation Working Group, *Fall Meeting Summary*, NAT'L CONFERENCE OF STATE LEGISLATORS, <http://www.ncsl.org/programs/enviro/cleanup/SSEBfall2007.htm> (last visited Oct. 16, 2008) (archived Web page on file with author); see Testimony of Cort Richardson, *supra* note 110, at 2 (noting that the DOE has "conducted thousands of shipments" of TRU waste to WIPP "without serious incident and with extensive public support in the affected areas").

189. SSEB Radioactive Materials Transportation Committee and Transuranic Waste Transportation Working Group, *Fall Meeting Summary*, *supra* note 188.

190. *WIPP Transportation Safety Program History*, *supra* note 89, at 2–3.

191. Interview with Alex Schroeder and Jennifer A. Salisbury, *supra* note 134.

stated, "I think generally it has worked pretty well."¹⁹² Similarly, Janet Greenwald of Citizens for Alternatives to Radioactive Dumping (CARD) in Albuquerque said that the New Mexico Radioactive Waste Consultation Task Force appears to be "quite active" with the WGA and that "they have made some strides" advancing a safety agenda there.¹⁹³

2. Criticisms

Nonetheless, activists continue to express concern about the WIPP transportation program's impacts on communities along the truck route, particularly in Carlsbad. Joni Arends, executive director of Concerned Citizens for Nuclear Safety (CCNS) in Santa Fe, New Mexico, said that "environmental justice issues are large in [New Mexico] as well, because many of these routes are past communities of color."¹⁹⁴ Janet Greenwald of CARD stated, "I do believe that the communities that bear the brunt of the transportation program are neglected."¹⁹⁵ Greenwald further stated that "[r]adiation comes off of [the WIPP] trucks all the time; it's just below regulatory concern."¹⁹⁶

CARD sued the DOE, alleging that the WIPP route discriminates against the people of color who live nearby, particularly in South Carlsbad.¹⁹⁷ According to Greenwald, South Carlsbad is "where the poorer and mostly Hispanic people live . . . and the WIPP trucks go . . . right by the biggest, busiest intersection where the Wal-Mart is, which is also where the close-by community sends their kids to run across the street and get milk and bread"¹⁹⁸ Under the terms of a recent settlement, CARD expected to receive \$50,000 from the government for a study of a relief route around South Carlsbad, \$25,000 "to help people along the WIPP route to have a voice in the state's emergency preparedness for WIPP accidents and other safety issues," and \$25,000 in legal fees.¹⁹⁹ In addition to the lawsuit, activists continue to voice concerns about the potential

192. Interview with Don Hancock, Southwest Research and Information Center, in Albuquerque, N.M. (Feb. 10, 2009).

193. Interview with Janet Greenwald, Citizens for Alternatives to Radioactive Dumping, in Albuquerque, N.M. (Feb. 10, 2009).

194. Interview with Joni Arends, Concerned Citizens for Nuclear Safety, and Scott Kovac, Nuclear Watch New Mexico, in Santa Fe, N.M. (Feb. 12, 2009).

195. Interview with Janet Greenwald, *supra* note 193.

196. *Id.*

197. *Id.*

198. *Id.*

199. E-mail from Janet Greenwald, Citizens for Alternatives to Radioactive Dumping, to the author (Aug. 18, 2009) (on file with author).

exposure of children and others to radiation from WIPP trucks when the trucks stop at public places.²⁰⁰

Emergency preparedness along the route also remains a concern to some people. For example, activists assert that WIPP trucks sometimes travel in convoys of up to three trucks, creating the potential for more serious accidents and straining the resources available for response.²⁰¹ Activists also note that in New Mexico, many first responders are volunteer fire departments with well-meaning but under-resourced staff that lack the training and equipment necessary to respond to emergencies involving WIPP shipments.²⁰² Greenwald credits Anne Clark of the New Mexico Radioactive Waste Consultation Task Force with trying to “bridge some of the gaps” in emergency preparedness, but Greenwald concludes “there’s a long way to go.”²⁰³

With respect to the security of TRU waste transportation, which the WGA states it addressed after 9/11 by including a template security protocol in the *WIPP Program Implementation Guide* and developing individual security protocols,²⁰⁴ Janet Greenwald said that DOE officials “do everything in their power not to let it come up” in discussions.²⁰⁵ She believes that they want to avoid giving “the impression that the WIPP trucks are dangerous or in danger, so that the people along the route and in Carlsbad will . . . just think of them as any other truck—a garbage truck,” perhaps.²⁰⁶ Other activists point out limitations in the cooperative process that have manifested themselves when unexpected situations arose.²⁰⁷

200. Interview with Joni Arends and Scott Kovac, *supra* note 194.

201. *Id.* Ms. Arends points out that this pattern is contrary to the DOE’s environmental impact analysis, which analyzed potential impacts of one truck traveling at a time. *Id.*

202. See, e.g., Dave Kavanaugh, *Groups Demand Better WIPP Shipping Safety*, ALBUQUERQUE J., May 26, 2006, available at http://www.abqjournal.com/north/463341_north_news05-26-06.htm.

203. Interview with Janet Greenwald, *supra* note 193.

204. Interview with Alex Schroeder and Jennifer A. Salisbury, *supra* note 134.

205. Interview with Janet Greenwald, *supra* note 193.

206. *Id.*

207. According to Don Hancock, one such situation arose in 2009 when Texas determined that part of a West Texas highway was no longer safe for WIPP shipments. The DOE, Hancock recalls, presented the situation as an “emergency” to New Mexico transportation officials, which had to accept a related change to the WIPP route in New Mexico that had not gone through New Mexico rulemaking procedures. “And so the Southern States’, Western States’ protocols didn’t work,” Hancock concluded, “because they had never conceived of that scenario.” Interview with Don Hancock, *supra* note 192.

Activists also complain that the DOE at times has not listened to warnings from New Mexico about impending bad weather. For example, Joni Arends recalls one instance when the drivers of a WIPP truck ignored the state's warnings of a major snowstorm and refused to stop at a military base in Colorado Springs; they instead continued south, then got stuck at a truck stop in northern New Mexico and asked the state police to guard the truck while the drivers slept.²⁰⁸ She is concerned that such a request draws limited state police resources away from priorities during inclement weather, such as patrolling the roads, and directs those resources to protecting DOE equipment.²⁰⁹ Arends has raised fairness concerns as well, noting that New Mexico is one of the poorest states in the United States.²¹⁰

D. Challenges Ahead

Asked to name challenges facing the WIPP transportation program, state regional organizations' staff members and activists alike refer to the importance of avoiding complacency in program implementation now that it is no longer at the top of the governors' agendas.²¹¹ Don Hancock fears that "until we have the big, bad accident, over time, people get more complacent," because "that's kind of human nature."²¹² To prevent that, he said, activists "have spent some time trying to make sure that the state of New Mexico at least doesn't sort of fall down on the job as DOE and the states become more complacent."²¹³

A related challenge involves transitioning the WIPP transportation program from a startup effort to a routine, operational program. Because the program is extra-regulatory, there is a need to consider which protocols should be relaxed and which should be made more stringent in order to operate the program for the duration of WIPP's disposal phase.²¹⁴ Maintaining the collaborative working relationships among the states interested in TRU waste transportation and the federal government is another concern.²¹⁵

Representatives of state regional organizations and state agencies also cite the challenge of transferring lessons learned and accomplish-

208. Interview with Joni Arends and Scott Kovac, *supra* note 194.

209. *Id.*

210. *Id.*

211. Interview with Alex Schroeder and Jennifer A. Salisbury, *supra* note 134.

212. Interview with Don Hancock, *supra* note 192.

213. *Id.* In particular, Mr. Hancock mentioned activist organizations like Southwest Research, CARD, CCNS, and Nuclear Watch New Mexico.

214. Interview with Alex Schroeder and Jennifer A. Salisbury, *supra* note 134.

215. Interview with Anne deLain W. Clark, *supra* note 90.

ments in the WIPP transportation program to other programs. One former state official who has been involved in the WIPP transportation program for more than a decade has observed “a lot of pushback from DOE,” which the former official maintains hampers the department’s use of the WIPP cooperative relationships in other areas, including the high-level waste program.²¹⁶

IV. CRUCIAL INGREDIENTS OF STATES’ COLLABORATION

A. Ingredients of the WIPP Transportation Program

The state regional organizations attribute the success of the WIPP transportation program to the collaborative process. According to a WGA policy resolution, “The success of the WIPP transportation campaign is directly attributable to a collaborative planning effort between DOE and the Western states to develop and implement the [WGA] WIPP Transportation Safety Program.”²¹⁷ The 2003 Memorandum of Agreement between the WGA and the CBFO states that, “[i]n part, it has been these [transportation operating] procedures and the cooperative planning process which has produced the exemplary safety record of the WIPP program and its extraordinary acceptance by the public and elected officials.”²¹⁸

What makes the states’ collaboration on TRU waste transportation successful from so many perspectives? What elements are missing and by their absence contribute to its shortcomings? This Part identifies six crucial ingredients of the states’ collaboration through the WIPP transportation program: (1) high-level political attention and accountability; (2) multidisciplinary and committed state professionals; (3) shared responsibility and pride in addressing a national policy challenge; (4) a commitment to exceed legal requirements; (5) a “living,” organic structure; and (6) the capacity for periodic program evaluations and updates. This Part further suggests that these ingredients comprise a model for collaboration in other areas of policy, and analyzes their transferability beyond TRU waste transportation.

1. High-Level Political Attention and Accountability

The state regional organizations’ collaboration on TRU waste transportation has benefited from high-level political attention and the accountability that flows from such attention. Though they operate through

216. Interview with Alex Schroeder and Jennifer A. Salisbury, *supra* note 134.

217. WGA Pol’y Resol. 09-4, *supra* note 176, § A, ¶ 4.

218. 2003 Regional Protocol, *supra* note 59, at 3.

various structures, each of the three regional organizations has the attention of, and obtains direction from, governors and other high-level state officials who have an interest in and are committed to collaboration.²¹⁹ The governors' attention to collaboration on TRU waste transportation was perhaps at its highest during the period leading up to the first shipments of waste to WIPP in 1999. While the governors are less involved today, high-level political support in the states is still available for big enough issues.²²⁰

The WGA and the other state regional organizations have included designations of responsibility and directives for implementing the WIPP transportation program in their organic documents, building accountability into the program. For example, under a 2009 MOA, each Western Governor reaffirmed "continued support for the safe transportation of TRU waste and operations of WIPP."²²¹ The agreement further provided for "corridor states" to appoint to the WGA's WIPP Transportation TAG, a governor's representative "responsible for representing the Governor and state in identifying, developing and implementing principles, procedures and agreements between the Western States and the DOE-CBFO."²²² WGA Policy Resolution 09-4 contains a directive that the WGA and its WIPP Transportation TAG "work cooperatively with the Congress, DOE, the Department of Transportation, NRC, and EPA to ensure the safe and uneventful transport of TRU waste to WIPP."²²³

2. Multidisciplinary and Committed State Professionals

Equally important to the state regional organizations' collaboration is the diversity of professional expertise among the state agency staff that participates in state regional organizations' TRU waste transportation programs. For instance, the SSEB's Transuranic Waste Working Group includes professionals with state public health, environmental, emergency

219. See, e.g., 2009 Regional Protocol, *supra* note 93.

220. According to Jennifer A. Salisbury, Secretary of the New Mexico EMNRD at that time, "[e]very Governor in the route was really brought in, so it [was] really easy for states to go to a high level," which was important in getting the DOE's attention. Interview with Alex Schroeder and Jennifer A. Salisbury, *supra* note 134.

221. 2009 Regional Protocol, *supra* note 93, at 5.

222. *Id.* at 5. The previous, 2003, WGA-DOE MOA provided for the appointment to the WGA's WIPP Transportation TAG of a governor's representative to represent the governor and the state in negotiating with the other western states and the DOE, as well as policy and security representatives. 2003 Regional Protocol, *supra* note 59, at 5.

223. WGA Pol'y Resol. 09-4, *supra* note 176, § C, ¶ 2.

management, public safety, and energy agencies.²²⁴ Within New Mexico alone, several state departments and agencies participate in the Radioactive Waste Consultation Task Force, whose coordinator co-chairs the WGA's WIPP Transportation TAG.²²⁵ Informal communications and personal relationships among members of state regional organizations' TRU waste transportation teams are also important, as is the fact that many state agency staff members have long experience and institutional knowledge. Alex Schroeder of the WGA observed, "[the] WGA's benefited by having the same people in place because they all know each other [and] it's a good network."²²⁶ This means that state participants can talk to one another informally, and they do so between the WGA's semiannual meetings.²²⁷

3. Shared Responsibility for and Pride in Addressing a National Policy Issue

In addition, the state regional organizations have accepted shared responsibility, along with the federal government, for TRU waste transportation and related issues of national nuclear waste policy. For instance, the WGA-DOE "Regional Protocol for the Safe and Uneventful Transportation of Transuranic (TRU) Waste" expressly states that "[m]anaging the safe and uneventful transportation of TRU waste from [DOE] facilities to the WIPP . . . is the joint responsibility of federal, state, local and tribal governments" and that "[i]t is also the joint responsibility of these governments to manage the safe and uneventful transportation of TRU waste originating in or destined for the western United States."²²⁸ These affirmations sound broader than the states' legal obligations as described in the 1981 consultation and cooperation agreement between the DOE and New Mexico.

The state regional organizations also show a sense of pride in contributing to a solution to a national policy and need—namely, cleaning up the nuclear weapons complex and disposing of waste generated at nuclear power plants. WGA Policy Resolution 09-4 acknowledges that "[a]s the

224. S. STATES ENERGY BOARD, ANNUAL REPORT 2010, *supra* note 100, at 11; see S. STATES ENERGY BD., TRANSURANIC (TRU) WASTE TRANSPORTATION WORKING GROUP STATE GOVERNMENT REPRESENTATIVES, *supra* note 99; cf. Rabe, *supra* note 1, at 186 (noting that a network of state professionals, many in environmental agencies, has influenced RGGI policy development and coalition building).

225. *The Radioactive Waste Consultation Task Force*, N.M. ENERGY, MINERALS AND NAT. RESOURCES DEP'T, WIPP TRANSPORTATION SAFETY PROGRAM, <http://www.emnrd.state.nm.us/WIPP/TaskForce.htm> (last visited May 24, 2011).

226. Interview with Alex Schroeder and Jennifer A. Salisbury, *supra* note 134.

227. *Id.*

228. 2009 Regional Protocol, *supra* note 93, at 1.

only permanent repository for defense-related TRU waste, WIPP is an integral component of DOE's national cleanup program and is critical to its success."²²⁹ The same resolution states that the Western Governors believe that "the WGA WIPP Transportation Safety Program is essential to the expeditious cleanup and disposal of TRU waste from the U.S. nuclear weapons complex and the operation of WIPP."²³⁰

Representatives of the state regional organizations and their member states often point to their collaboration on TRU waste shipments headed to WIPP as a potential model for efforts to transport other radioactive wastes. Two state officials who are active in the WGA's WIPP Transportation Safety Program observed, "[t]he WGA modeled the way for other regional collaboration groups across the nation to enter into similar programs for effective management of WIPP transportation issues and negotiations with USDOE."²³¹ The midwestern states have recommended that the DOE use the regional-planning process developed for WIPP as a model for transportation planning for other kinds of radioactive waste.²³² The sense of accomplishment that accompanies these statements presumably creates incentives for continued collaboration in a positive reinforcement loop.

4. Commitment to Exceed Regulatory Requirements

By entering into cooperative agreements and other negotiated agreements, the state regional organizations have demonstrated and have extracted from the DOE a commitment to exceed regulatory requirements in various areas to achieve their mutual goals. The first DOE commitments to go beyond regulatory requirements appeared in the department's agreements with the State of New Mexico in the early

229. WGA Pol'y Resol. 09-4, *supra* note 176, § A, ¶ 5.

230. *Id.* § B, ¶ 1.

231. Clark & Ottmer, *supra* note 15, at 5. Similarly, the WGA's website states: "The [WIPP] transportation safety program is now considered a model program that has gained public confidence and acceptance for the transport of transuranic waste to WIPP. It also has been used to guide the development and implementation of other shipping campaigns such as spent fuel and cesium." *WIPP Transportation Safety Program History*, *supra* note 89.

232. Office of Civilian Radioactive Waste Management, *Shipment Planning: Priority Issues for the Midwestern States*, *supra* note 185; see Letter from Ken Niles to Federico Peña, *supra* note 171, at 2-3 (recommending in a joint letter from five regional cooperative agreement groups that the DOE's various transportation programs use the *WIPP Program Implementation Guide* as a base document and follow a route-planning process similar to that used for WIPP shipments).

1980s.²³³ Likewise, the 2003 MOA between the WGA and the CBFO commits the parties to conduct the WIPP transportation program “using the standards and procedures developed through the Western Regional Planning Process,” which “recognizes that many of the procedures are above the minimum federal regulatory requirements, but were employed to achieve the high level of safety and shipment success since 1999.”²³⁴

5. “Living” Structure

The state regional organizations’ structures, which rely heavily on cooperative agreements with the DOE, their negotiated agreements among the member states, and their guidance documents, allow for growth and change because the parties can add, revise, or delete provisions as appropriate in light of changing needs and goals. The state regional organizations have made use of this built-in opportunity to embrace new responsibilities. After September 11, 2001, for example, the WGA and the DOE added a finding to their MOA governing TRU waste transportation, acknowledging that the attacks on that day “changed the perception of threats to radioactive material shipments” in the United States and resolving “to work to coordinate security planning, communications and response to threats with DOE TRU waste shipments.”²³⁵

Documents developed by the state regional organizations and the DOE to implement the WIPP transportation program are “living” in nature as well. For example, the WGA’s *WIPP Program Implementation Guide* and *WIPP Transportation Plan* are intended to be “living” documents.²³⁶ Thus, following the finding noted above on post-9/11 changes in perceived threats to shipments of radioactive materials, the WGA included a template for a security plan in the *WIPP Program Implementa-*

233. See Stipulated Agreement, *supra* note 33, and Agreement for Consultation and Cooperation, *supra* note 34.

234. 2003 Regional Protocol, *supra* note 59, at 2; 2009 Regional Protocol, *supra* note 93, at 2. The CSG Midwestern Radioactive Materials Transportation Committee writes that while some of its recommended practices “go beyond the explicit regulatory requirements for shipments,” those “extra-regulatory measures are both reasonable and necessary to ensure that shipments take place in a manner that is safe, secure, and merits public confidence.” CSG MIDWEST PLANNING GUIDE, *supra* note 106, at 4.

235. 2009 Regional Protocol, *supra* note 93, at 3–4.

236. *Id.* at 4 (acknowledging that feature); 2003 Regional Protocol, *supra* note 59, at 4; see Clark & Ottmer, *supra* note 15, at 4 (describing the original 1996 version of this Memorandum of Agreement as representing “full endorsement of the principles of the Guide as a living document that reflects the continuing agreements in the planning and dialogue process”).

tion Guide.”²³⁷ Similarly, the CBFO’s *WIPP Transportation Plan* provides for the CBFO to review it annually “or when significant changes occur during the year” and to make necessary revisions, including those “in response to changes in fiscal, contractual, political, regulatory or operating environments.”²³⁸

6. Capacity for Program Evaluation and Updates

In addition, the state regional organizations expressly provide for periodic program evaluation and revision. This facilitates capacity-building. For instance, the WGA’s *WIPP Transportation TAG* and the other regional organizations “continue[] to meet regularly (two to three times a year) to assess the continuing effectiveness of the [*WIPP Program Implementation Guide*] and the *WIPP Transportation Safety Program* and to deal with ongoing concerns.”²³⁹ WGA Policy Resolution 09-4 directs the WGA “to monitor DOE’s progress toward achieving the policy objectives specified in [the] resolution and to report its finding and recommendations to the Western Governors.”²⁴⁰ Significantly, WGA policy resolutions—including the Policy Resolution on TRU Waste—automatically sunset every three years unless they have been re-adopted, with or without amendments.²⁴¹ The CSG-Midwest updates state-specific information in its *Planning Guide for Shipments of Radioactive Materials Through the Midwestern States* in conjunction with spring and fall planning meetings.²⁴²

B. A Model for Collaboration on Other Policy Challenges

Together, the six ingredients that have proven crucial to collaboration in the WIPP transportation program comprise a model for effective collaboration by states to address other policy challenges. WIPP’s circumstances and TRU waste transportation are uniquely rooted in the historic cooperation between the DOE and the State of New Mexico, and a federal legislative framework for TRU waste transportation is memorialized

237. W. GOVERNORS’ ASS’N WASTE ISOLATION PILOT PLANT TECHNICAL ADVISORY GRP., *WIPP TRANSPORTATION SAFETY PROGRAM IMPLEMENTATION GUIDE*, APPENDIX: SECURITY FOR RADIOACTIVE MATERIALS SHIPMENTS, available at <http://www.westgov.org/wga/initiatives/wipp/PIG-Web/Section%207/Guidance%20for%20Security%20for%20Radioactive%20Materials%20Shipments.pdf>.

238. *WIPP TRANSPORTATION PLAN*, *supra* note 64, at 2.

239. Clark & Ottmer, *supra* note 15, at 5.

240. WGA Pol’y Resol. 09-4, *supra* note 176, § C, ¶ 3.

241. WGA RADIOACTIVE WASTE TRANSPORTATION PROGRAM (ISSUE BRIEF), *supra* note 92, at 2. The WGA’s policy resolution on TRU waste was most recently re-adopted in 2009. WGA Pol’y Resol. 09-4, *supra* note 176.

242. CSG MIDWEST PLANNING GUIDE, *supra* note 106, at 3.

in the WIPP LWA. Nonetheless, the key ingredients of the states' regional collaboration are themselves powerful and adaptable to other policy problems. In particular, the ingredients imply a high potential for states to collaborate regionally on other environmental and security initiatives within the federal system, such as climate change, homeland security, and disaster planning.

Like TRU waste, these issues are likely to command high-level political attention, as did the WIPP transportation program in its early years. Given the salience of such issues, state officials (and the voting public) are likely to provide for strict accountability for their implementation. Even more than TRU waste transportation, the nature of climate change, homeland security, and disaster-planning demands multidisciplinary teams and experienced state professionals who can work well within their states and with counterparts in other states and at different levels of government. In many states, such as those that have convened commissions to study climate change mitigation and adaptation, such teams already are accustomed to working together. Many states also share responsibility for and pride in addressing emerging national policy issues, and they show a willingness to exceed regulatory requirements to do so.²⁴³

The other two ingredients of the WIPP transportation program—a “living” structure that would facilitate revisions of governments’ agreements and provisions for program evaluation and updates—are also transferable to other areas of policy. “Living” collaborative structures such as memoranda of agreements are easily adaptable to regional collaboration on climate change, homeland security, or disaster-planning efforts. Provisions for periodic program evaluations and updates can be included to reflect changing needs, funding cycles, and available resources.

Perhaps the greatest challenge to the application of the WIPP transportation model to other areas of policy is in the area of state budget shortfalls, which could undermine several of the six ingredients. Furloughs and layoffs that limit state staff availability and enthusiasm, coupled with pressure to limit federal spending in light of mounting deficits, threaten the availability of dedicated, multidisciplinary teams of professionals and bring political pressure to scale back initiatives. The combination of limited resources and political pressure could undermine high-level (positive) political attention and commitments to exceed regulatory

243. States have spearheaded regional climate change initiatives, for example, even in the absence of federal action (and sometimes to supplement or carry out federal action). See Barry G. Rabe, *Regionalism and Global Climate Change Policy: Revisiting Multistate Collaboration as an Intergovernmental Management Tool*, in *INTERGOVERNMENTAL MGMT.*, *supra* note 1, at 176, 176–78.

requirements in particular. As economic conditions continue to strain states and other governments, such conditions are likely to illuminate the relative strength of each of the six ingredients and to identify other crucial factors in long-term collaboration. The ingredients are likely to carry different relative weights in different policy arenas. Further research to explore these variations would be useful in enhancing efforts to promote conditions that foster collaboration, even in trying times and among competing priorities.

V. CONCLUSION

In response to states' concerns about their ability to protect the public in the event of an accidental release of radiation due to the transportation of waste to WIPP, the federal government created financial and regulatory incentives to encourage New Mexico and other states on the "WIPP route" to develop programs to implement the WIPP transportation program. Even before Congress enacted the WIPP LWA, the DOE provided New Mexico with similar incentives through a series of cooperative agreements. The DOT had supported states' efforts to collaborate on TRU waste transportation at the regional level by providing funding for the WGA to report to Congress on western states' concerns and priorities regarding the initial WIPP shipments.

In time, however, the states' collaboration on a regional basis to facilitate TRU waste transportation transformed traditional models of financial and cooperative federalism into a regional, dynamic network of actors that fosters learning and policy development in many complementary ways and directions. The program benefits from the DOE's participation through the CBFO and financial assistance, and it engages diverse state and tribal actors, including professionals with expertise in a variety of disciplines and agency responsibilities. Private sector representatives (e.g., DOE contract carriers) participate, and in the West, nonprofits participate as well in the quarterly meetings convened by the New Mexico Radioactive Waste Consultation Task Force. Information-sharing regularly occurs on program implementation issues, such as the timing and routes of WIPP shipments, and on policy issues such as federal cleanup of the nuclear weapons complex. This has resulted in positive outcomes in terms of effective transportation of WIPP shipments. Moreover, positions adopted by the WGA, the SSEB, and the other state regional organizations have influenced the DOE, which benefits from their implementation activities and associated public support.

More importantly, the implementation of the WIPP transportation program signals the evolution of the federal and state governments' roles,

as well as the governments' conceptions of their respective roles, in areas that blur environmental management and national security concerns. Those roles have become infinitely more complex and intertwined than those articulated by the DOE and the State of New Mexico in their 1981 "consultation and cooperation" agreement. That agreement identified national security and the safe disposal of defense radioactive wastes as the federal government's responsibility and public health and welfare related to radioactive waste transportation as the state's responsibility. Building on the original agreement with cooperative agreements of their own, the WGA and other state regional organizations have become increasingly engaged in security matters, particularly since September 11, 2001. The federal government has supported state emergency response training as well, pursuant to the WIPP LWA. Increasingly, there is a need for coordination among all levels of government, the private sector, and the public on disaster-planning drills and other security initiatives. The WIPP transportation program offers a model for efforts in these areas.

Despite the success of the WIPP transportation program in facilitating transportation of waste to WIPP and in building productive working relationships between the DOE and the state agencies who participate in the program, the program reveals shortcomings in its relationship to local governments and communities along the WIPP route. The WIPP transportation program therefore underscores the political, institutional, and practical challenges to increased coordination across different levels of government. The six ingredients that have been crucial to states' collaboration in the WIPP transportation program offer a useful, time-tested model for collaboration in other contexts. The program's shortcomings illuminate areas in need of extra attention when applying the model to other policy areas in order to ensure the model's continued improvement.

