

ENVIRONMENTAL LAWS FOR A THROW-AWAY SOCIETY

INTRODUCTION

The past five years have seen a dramatic increase in the number of legislative proposals relating to solid waste¹ disposal and recycling.² Provisions that criminalize improper disposal stand out among the newly proposed environmental laws.³ Other environmental reform legislation seeks to deter excessive disposal through various means.⁴ The threat of significant health risks arising from mismanaged disposal

1. The Resource Conservation and Recovery Act defines solid waste as: [A]ny garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining and agricultural operations, and from community activities, dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 1342 of Title 33, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954.

42 U.S.C. § 6903(27) (1983).

2. Kovacs & Anderson, *States as Market Participants in Solid Waste Disposal Services — Fair Competition or the Destruction of the Private Sector?* 18 *Env'tl. L. Rep.* (Env'tl. L. Inst.) 779, 781 (1988).

3. See *infra* notes 52-82 and accompanying text for a discussion of Missouri's new solid waste disposal law which imposes criminal penalties on violators.

Prior to the recent increased attention on solid waste disposal, criminal sanctions were used only in hazardous waste regulations. See Leon, *Environmental Criminal Enforcement: A Mushrooming Cloud*, 63 *ST. JOHN'S L. REV.* 679 (1989); see also Comment, *Criminal Sanctions for Environmental Crimes and the Knowledge Requirement: United States v. Hayes International*, 786 F.2d 1499 (11th Cir. 1986), 25 *AM. CRIM. L. REV.* 535, 538 (1988) (discussing the benefits of imposing criminal penalties over other enforcement methods).

4. See *infra* notes 89-92 and accompanying text for a discussion of California's use of tax incentives in its solid waste legislation.

sites, as well as limited landfill space and raw materials, has compelled both state and federal legislatures to take action.⁵

In the next five to seven years, forty-five percent of the municipal solid waste landfills in the United States will reach capacity.⁶ Despite the fact that many landfills are approaching capacity, Americans continue to generate over 160 million tons of solid waste per year;⁷ four times as much garbage as produced in Japan by half as many people.⁸ Although a recent Roper poll disclosed that more citizens are becoming environmentally conscious,⁹ the majority of people will do little or nothing to help the environment.¹⁰ Presently, most laws merely require separation and collection of recyclables.¹¹ Such laws create a "recycling illusion" because they fail to require that collected items actually be recycled into new products.¹²

5. See Current Developments, *Solid Waste*, 21 Env't Rep. (BNA) 132 (1990) (discussing NIMBY-ism or the "Not In My Backyard" attitude regarding solid waste disposal).

6. *Id.* (citing a report released by the Environmental Protection Agency (EPA) on Feb. 28, 1990). See 135 CONG. REC. S10,654 (daily ed. Sept. 6, 1989) (recognizing EPA's estimate that 80% of existing landfills with permits will close within 20 years).

7. 135 CONG. REC. S10,654 (daily ed. Sept. 6, 1989) (statement of Senator Bingaman introducing Senate Bill 1585, a bill to amend the Resource Conservation and Recovery Act). See *infra* notes 45-50 and accompanying text for a discussion of Senate Bill 1585; see also Office of Technology Assessment Report, *Solid Waste: Congress Urged to Adopt New National Policies to Reduce Waste Generation, Increase Recycling*, 20 Env't Rep. (BNA) 1268 (1989); Kovacs & Anderson, *supra* note 2, at 780.

8. See Kovacs & Anderson, *supra* note 2, at 780; see also *Newsday*, Dec. 13, 1987, at G9, col. 1.

9. Current Developments, *General Policy: Public Opinion Tilting Toward Environment; Green Consumers Still Outnumbered, Roper Says*, 21 Env't Rep. (BNA) 661 (1990) (citing the results of a Roper poll commissioned by the S.C. Johnson Wax Company, released July 31, 1990).

10. *Id.* The poll divided those responding into five categories:

True-Blue Greens (11 percent), whose behavior is consistent with strong active environmental concerns; Greenback Greens (11 percent), who express environmental concerns but who act through purchasing decisions; Basic Browns (28 percent), who neither desire to make any effort nor believe that individual action is effective; Grouzers (24 percent), who may express concerns but believe individual action is ineffective; and Sprouts (26 percent), who express some environmental concerns but have yet to act.

Id.

11. Current Developments, *Solid Waste: Recycling Laws Need to be Coupled with Private Sector Incentives, Panel Says*, 20 Env't Rep. (BNA) 1624 (1990).

12. *Id.* (reporting the consensus of a panel of solid waste professionals at a conference held Jan. 10, 1990). William L. Kovacs, a lawyer specializing in environmental law, warned that "[i]f we don't deal with this recycling illusion, by the year 2000 we will

The "recycling illusion" and excessive solid waste disposal problem will continue unless governments at all levels provide proper incentives to increase recycling and deter excessive disposal. This Recent Development will discuss various measures legislatures may implement to fight the war on trash. New measures include providing financial incentives to recycle, establishing mandatory recycling requirements, and imposing criminal sanctions for illegal solid waste disposal.

Part I of this Recent Development describes the federal laws, both proposed and enacted, that are related to solid waste management. Part II discusses the recently enacted Missouri legislation that criminalizes violations of its solid waste disposal regulations. Part III surveys solid waste legislation in other states. Finally, Part IV proposes the implementation of uniform waste management programs to remedy solid waste disposal problems.

I. LEGISLATIVE HISTORY OF SOLID WASTE MANAGEMENT LAW

Congress enacted the first federal solid waste management law, the Solid Waste Disposal Act (SWDA) in 1965.¹³ Administered by the Department of Health Education and Welfare,¹⁴ the SWDA encouraged solid waste disposal projects by providing state grants and research money.¹⁵ The Act also called for a national research program to develop improved methods of solid waste disposal and new methods

have a 56 million-ton shortfall" in the country's capacity for solid waste disposal per year. *Id.*

13. Solid Waste Disposal Act, Pub. L. No. 89-272, 1965 U.S. CODE CONG. & ADMIN. NEWS (79 Stat.) 983.

The purposes of SWDA included:

(1) to initiate and accelerate a national research and development program for new and improved methods of proper and economic solid-waste disposal, including studies directed toward the conservation of natural resources by reducing the amount of waste and unsalvageable materials and by recovery and utilization of potential resources in solid wastes; and

(2) to provide technical and financial assistance to state and local governments and interstate agencies in the planning, development, and conduct of solid-waste disposal programs.

Id. at 990.

14. 1965 U.S. CODE CONG. & ADMIN. NEWS 3608. *See also* Current Developments, *Impending Shortage of Landfill Capacity Leads to Renewed Focus on Solid Waste Disposal*, 21 Env't Rep. (BNA) 9999 (1990) (noting that the Environmental Protection Agency had not been created yet).

15. 1965 U.S. CODE CONG. & ADMIN. NEWS 983, 992 (citing § 206 of the Act). Specifically, the Act focused on the restriction of openly burning garbage.

of recycling.¹⁶

In 1970, Congress amended SWDA and renamed it the Resource Recovery Act (RRA).¹⁷ RRA provided for the collection and recycling of materials.¹⁸ RRA further proposed the development of technologies to generate electric power from solid wastes.¹⁹

In 1976, Congress reauthorized RRA and changed its name to the Resource Conservation and Recovery Act (RCRA).²⁰ In drafting RCRA, Congress recognized two serious problems. First, land for landfill space was becoming a scarce resource.²¹ Second, rapid consumption of domestic raw materials could potentially cause a

16. 1965 U.S. CODE CONG. & ADMIN. NEWS 3608, 3615.

17. Resource Recovery Act of 1970, Pub. L. No. 91-512, 1970 U.S. CODE CONG. & ADMIN. NEWS (84 Stat.) 1427. RRA amended the purpose of the Act to encourage the following:

(1) to promote the demonstration, construction, and application of solid waste management and resource recovery systems which preserve and enhance the quality of air, water, and land resources;

(2) to provide technical and financial assistance to state and local governments and interstate agencies in the planning and development of resource recovery and solid waste disposal programs;

(3) to promote a national research and development program for improved management techniques, more effective organizational arrangements, and new and improved methods of collection, separation, recovery and recycling of solid wastes, and the environmentally safe disposal of nonrecoverable residues;

(4) to provide for the promulgating of guidelines for solid waste collection, transport, separation, recovery, and disposal systems; and

(5) to provide for training grants in occupations involving the design, operation, and maintenance of solid waste disposal systems.

Id.

18. *Id.* House Report 1155 noted that \$4.5 billion were spent annually to manage solid waste. The largest portion of the allocated funds were spent on collecting and transporting waste to a dump or an incinerator. H.R. REP. NO. 1155, 91st Cong., 2d Sess., reprinted in 1970 U.S. CODE CONG. & ADMIN. NEWS 4552, 4553.

19. 1970 U.S. CODE CONG. & ADMIN. NEWS 4552, at 4554. The House Report concluded that economic incentives must be provided to make the recapture and recycling of useful and energy producing materials attractive to the industries which produce such solid waste. *Id.*

The environmental issues surrounding solid waste management in 1970 closely resemble the issues faced today. Such issues include whether the government should artificially increase the market for recyclable waste and whether the government should penalize users of new materials and provide a tax exemption for users of recycled materials. See also Current Developments, *supra* note 14, at 9999.

20. Resource Conservation and Recovery Act of 1976, Pub. L. No. 94-580, 1976 U.S. CODE CONG. & ADMIN. NEWS (90 Stat.) 6238.

21. *Id.* at 6240.

shortage.²²

Subtitle D of RCRA outlined the Environmental Protection Agency's (EPA) authority to regulate solid waste.²³ RCRA called for minimum solid waste management practices,²⁴ the closing of all facilities not in compliance with the rules,²⁵ and inspection and monitoring of solid waste facilities.²⁶

Furthermore, RCRA gave states the authority to regulate solid waste.²⁷ States could develop their own departments of environmental management, institute collection and recycling programs, and regulate solid waste management practices.²⁸ Through financial assistance to the states, Congress sought to provide for the creation of state municipal solid waste plans, to prohibit new open dumps, and to plan for the closing of all open dumps.²⁹

RCRA, however, focused primarily on the regulation of hazardous waste.³⁰ Consequently, federal attention to solid waste management

22. *Id.* at 6241.

23. *Id.* RCRA placed the regulatory, technical assistance, and planning functions within the EPA instead of HEW. RCRA placed the promotional functions such as the development of markets for recovered materials and the development of an index describing the characteristics of recovered materials for substitution of new materials with similar characteristics in the Department of Commerce. *Id.* at 6242.

24. Each state plan must at a minimum: (1) provide means for coordinating the plan, (2) prohibit new open dumps and require all solid waste to be utilized for resource recovery or disposed of in sanitary landfills, (3) close or upgrade all existing open dumps, (4) establish state regulations to implement the plan, (5) allow local governments to enter long-term contracts for the supply of solid waste for recycling facilities, and (6) provide for environmentally sound resource conservation and solid waste disposal. *Id.* at 6299.

25. *Id.* at 6245.

26. *Id.*

27. *Id.* at 6242.

28. *Id.* The United States Supreme Court narrowed the states' authority to manage solid waste. *Philadelphia v. New Jersey*, 437 U.S. 617 (1978). In *Philadelphia v. New Jersey*, the Supreme Court found a New Jersey statute banning the import of trash from other states unconstitutional.

29. 42 U.S.C. §§ 6921-6979 (1988). See also Kovacs & Anderson, *supra* note 2, at 781. The Committee on Interstate and Foreign Commerce reasoned that new dumps should be prohibited and existing dumps should be closed to conserve limited landfill space and to coordinate sound environmental policies. The prohibition allows environmental laws to be both cost and environmentally effective. By implementing waste disposal reform, the government can eliminate air and water pollution, soil contamination, and surface run off which is often a result of mismanaged disposal. 1976 U.S. CODE CONG. & ADMIN. NEWS 6238, 6240-42.

30. See Current Developments, *supra* note 14. Congress' overriding concern cen-

lapsed.³¹ As a result, Congress turned its attention to the Superfund law³² and the identification and regulation of thousands of hazardous waste sites across the country.³³

Congress demonstrated its concern for hazardous waste with the Solid Waste Disposal Act Amendments of 1980.³⁴ The Amendments did not contain any new program directions for solid waste management.³⁵ Rather, the changes included increased authorizations for hazardous waste control.³⁶

RCRA was again reauthorized in 1984 through the Hazardous Waste Control and Enforcement Act.³⁷ That legislation focused on state hazardous waste programs and regulations for land disposal of hazardous waste.³⁸ In turn, federal funds for state and local solid waste programs were drastically cut.³⁹ Further, on the federal level, the solid waste portion of RCRA contained no enforcement mechanisms.⁴⁰

During the 101st Congress, many bills to reauthorize and to amend RCRA were introduced by both the House of Representatives and the Senate.⁴¹ The proposed legislation stressed trash management. A

tered on the effect of discarded hazardous waste on the population and the environment. H.R. 1491 noted that hazardous waste has little economic value, often cannot be neutralized, and imposes considerable costs on the generator. H.R. REP. NO. 1491, 94th Cong., 2d Sess., pt.1, reprinted in 1976 U.S. CODE CONG. & ADMIN. NEWS 6238. RCRA now authorizes the EPA to prescribe regulations for the handling of hazardous wastes. 42 U.S.C. § 6912 (1988).

The regulations of hazardous waste mandate compliance. Similarly, they provide a "cradle-to-grave" regulatory scheme to ensure that generators and disposers treat hazardous waste properly. See Comment, *supra* note 3.

31. See Kovacs & Anderson, *supra* note 2, at 782.

32. *Id.* The Superfund law, known as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), provides for the clean-up of hazardous waste spills. 42 U.S.C. §§ 9601-9675 (1988). See Gulick, *Superfund: Conscripting Industry Support for Environmental Cleanup*, 9 *ECOLOGY L.Q.* 524 (1981).

33. 1976 U.S. CODE CONG. & ADMIN. NEWS (90 Stat.) 6238, 6240.

34. 1980 U.S. CODE CONG. & ADMIN. NEWS (94 Stat.) 5019.

35. *Id.*

36. *Id.* at 5019-20. See also Duke, *Using RCRA's Imminent Hazard Provision in Hazardous Waste Emergencies*, 9 *ECOLOGY L.Q.* 599 (1981).

37. 1984 U.S. CODE CONG. & ADMIN. NEWS (98 Stat. 3221) 5576.

38. *Id.* at 5577-78. The enactment added subtitle I which provided the EPA with the authority to regulate underground storage tanks containing hazardous waste.

39. *Id.*

40. See Current Developments, *supra* note 14.

41. See *infra* notes 42-48 and accompanying text.

reauthorization bill proposed in the House of Representatives encouraged source reduction and recycling to avoid the use of landfills and incinerators.⁴² Moreover, the proposed reauthorization made RCRA's currently voluntary provisions mandatory. The bill outlined minimum requirements for state solid waste management plans⁴³ and required states to submit solid waste management plans to the EPA administrator.⁴⁴

Likewise, similar bills were proposed in the Senate.⁴⁵ A Senate bill to amend RCRA sought to clarify the states' responsibility for solid

42. H.R. 3735, 101st Cong., 1st Sess. (1989). The bill offered a target goal for municipalities to recycle 25% of their trash by 1992. *Id.* Further, it would have created a presidential commission on materials policy to recommend packaging and materials use. *Id.* Finally, it would have required the government to procure and utilize recycled products. *Id.*

The House Energy and Commerce Subcommittee unanimously approved an amended reauthorization bill known as the Waste Materials Management Act of 1989 on July 27, 1990. *Id.* The approved version of the bill omitted many of the provisions regarding hazardous waste. Noting that Congress had a full agenda, the Chairman of the Subcommittee, Representative Thomas Luken (D-Ohio), removed the controversial parts of the bill in order to arrive at an agreement without much debate. *See* Current Developments, *Solid Waste: RCRA Bill Approved by Subcommittee Without Provisions on Hazardous Waste*, 21 *Env't Rep. (BNA)* 653-54 (1990).

43. H.R. 3735, 101st Cong., 1st Sess. (1989). The suggested state plan would have included a permit program, provisions for the establishment of a recycling program, prohibition of the establishment of new open dumps along with the closing of existing dumps, and provisions for waste reduction. Further, the proposed act would have set forth minimum requirements for state regulations regarding personnel training and public education. The proposed act would have required states to manage the disposal of household hazardous waste, tires, yard waste, and large household appliances.

44. *Id.* States would have had 24 months after the enactment of the Waste Materials Management Act to submit their plans. In addition to delegating solid waste regulation to the states, the House bill would have proposed federal regulations for solid waste disposal and would have set forth the relationship of the Act to the state plans and permits. *Id.* *See also* H.R. 2723, 101st Cong., 1st Sess. (1989). H.R. 2723 sought to amend RCRA to include a provision for state compacts and regional disposal facilities. *Id.* (reintroduced as H.R. 116, 102nd Cong., 1st Sess. (1991)).

Although not a proposal to reauthorize RCRA, another bill would have provided a 10% tax credit to businesses and newspapers that purchase recycling equipment and machinery. H.R. 3654, 101st Cong., 1st Sess. (1989). In addition, the bill would have called for tax penalties for those newspapers that do not phase in use of at least 50% recycled newsprint after five years. *Id.* H.R. 3654 has been reintroduced as H.R. 507 in the 102nd Congress. H.R. 507, 102nd Cong., 1st Sess. (1991). *See also* *Solid Waste: 'Best and Worst' Major Newspaper Rankings Released in Recycling Survey*, *BNA Env't Daily* 14 (Sept. 21, 1990).

45. S. 1585, 101st Cong., 1st Sess., 135 *CONG. REC.* S10,654-55 (1989). *See also* 135 *CONG. REC.* S10,654 (daily ed. Sept. 6, 1989) (statements of Senator Bingaman introducing Senate Bill 1585, a bill to amend RCRA).

waste management. The bill required states to submit plans providing for adequate disposal of all solid waste.⁴⁶ Unlike the House bill, the Senate bill suggested, but did not mandate, that states consider developing regional compacts for solid waste disposal.⁴⁷ Finally, the bill required the EPA to identify alternative solid waste disposal management programs and to establish technical guidance for such programs.⁴⁸

Although the reauthorization of RCRA did not pass in the 101st Congress, it remains a top priority in the 102nd Congress.⁴⁹ Already, several bills to amend RCRA have been proposed or reintroduced in both the House and the Senate.⁵⁰

II. MISSOURI'S RESPONSE TO REDUCE SOLID WASTE DISPOSAL

While RCRA currently does not charge states to implement solid waste disposal plans, many states have made solid waste a priority. Recently, Missouri enacted legislation to reduce solid waste⁵¹ disposal and encourage recycling⁵² within the state.⁵³ In addition to regulating the disposal of construction materials,⁵⁴ the law bans the disposal of

46. S. 1585, 101st Cong., 1st Sess., 135 CONG. REC. S10,654. The plan must be submitted within 12 months of the enactment of the bill. *Id.*

47. *Id.* The bill suggested that the regional compacts can be the safest and most effective means of disposal management. *Id.*

48. *Id.* The EPA must satisfy these requirements within 12 months after the passage of the bill. *Id.*

49. See Mounteer, *Codifying Basel Convention Obligations Into U.S. Law: The Waste Control Act*, 21 *Env'tl. L. Rep.* (Env'tl. L. Inst.) 10,085 (Feb. 1991).

50. H.R. 870, 102nd Cong., 1st Sess. (1991) (mirrors H.R. 5359, 101st Cong., 2nd Sess. (1990)); H.R. 116, 102nd Cong., 1st Sess. (1991) (Resource Conservation and Recovery Act Amendment which mirrors H.R. 2723, 101st Cong., 1st Sess. (1989)); and S. 175, 102nd Cong., 1st Sess. (1991) (The Solid Waste Compact Act of 1991 which mirrors the Lead Battery Recycling Incentives Act, S. 1585, 101st Cong., 1st Sess. 1989).

51. The Missouri enactment defines solid waste as "garbage, refuse and other discarded materials including, but not limited to, solid and semisolid waste materials resulting from industrial, commercial, agricultural, governmental and domestic activities, but does not include hazardous waste . . . recovered materials, overburden, rock, tailings, matte, slag or other waste material from mining, milling or smelting." MO. REV. STAT. § 260.200(25) (Supp. 1990).

52. "Recycling" means "the separation and reuse of materials which might otherwise be disposed of as solid waste." *Id.* § 260.200(21).

53. *Id.* §§ 260.200-.345. The Missouri Legislature passed Senate Bill 530 on July 9, 1990. The new law became effective Aug. 28, 1990.

54. *Id.* §§ 260.210-.212. See *infra* notes 62-66 and accompanying text discussing the disposal of construction materials.

major appliances,⁵⁵ tires,⁵⁶ lead-acid batteries,⁵⁷ and yard wastes⁵⁸ in sanitary landfills. The law further obliges newspaper publishers to use recycled newsprint.⁵⁹ To ensure compliance with the new law, the state legislature enacted criminal sanctions for violations.⁶⁰

Missouri's new law imposes a criminal penalty on any person⁶¹ who illegally disposes of "demolition waste."⁶² The law mandates that persons involved in building construction or modification must dispose of construction material in a demolition or sanitary landfill.⁶³ The law requires that such persons maintain records of all disposal sites used

55. MO. REV. STAT. § 260.250.1 (Supp. 1990). Major appliances cannot be placed in sanitary landfills after Jan. 1, 1991. *Id.* Major appliances include "clothes washers and dryers, water heaters, trash compactors, dishwashers, microwave ovens, conventional ovens, ranges, stoves, wood stoves, air conditioners, refrigerators, and freezers." *Id.* § 260.200(13).

56. *Id.* §§ 260.270-.276. Waste tires must be delivered to a waste tire site, processing facility, or collection center for ultimate disposal beginning in 1991. *Id.* § 260.270.

A tire, for purposes of the statute, is "a continuous solid or pneumatic rubber covering encircling the wheel of a motor vehicle or trailer." *Id.* § 260.200(32). A waste tire is "a tire that is no longer suitable for its original intended purpose because of wear, damage, or defect." *Id.* § 260.200(34).

57. *Id.* §§ 260.260-.266. The statute defines battery or lead-acid battery as "a battery designed to contain lead and sulfuric acid with a nominal voltage of at least six volts and of the type intended for use in motor vehicles and watercraft." *Id.* § 260.200(1). Beginning in 1991, lead-acid batteries must be delivered to a recycling facility or battery wholesaler or manufacturer. Similarly, the law requires battery retailers to accept, in exchange, at least one used battery from customers purchasing new batteries. Retailers must post a written notice of the exchange program. *Id.* § 260.250, .262. See *infra* notes 70-74 and accompanying text discussing lead-acid batteries under the new law.

58. MO. REV. STAT. § 260.250 (Supp. 1990). Yard waste may not be placed in sanitary landfills after Jan. 1, 1992. Yard wastes include "leaves, grass clippings, yard and garden vegetation and Christmas trees. The term does not include stumps, roots or shrubs with intact root balls." *Id.* § 260.200 (38).

59. *Id.* § 260.255. See *infra* notes 75-78 and accompanying text discussing the required use of recycled newsprint by newspaper publishers. Consumers should utilize such waste to provide compost. Because newsprint naturally decomposes, it need not consume limited landfill space.

60. MO. REV. STAT. §§ 266.211-212 (Supp. 1990).

61. The statute defines person as "any individual, partnership, corporation, association, institution, city, county, other political subdivision, authority, state agency or institution, or federal agency or institution." *Id.* § 260.200(17).

62. *Id.* § 260.211. The term "demolition waste" refers primarily to construction materials.

63. *Id.* § 260.210.6. A demolition landfill is "a solid waste disposal area used for the controlled disposal of demolition wastes, construction materials, brush, wood wastes, soil, rock, concrete and inert solids insoluble in water." *Id.* § 260.200(6). A

for one year.⁶⁴ A person who knowingly disposes or causes the disposal of statutorily determined amounts of demolition waste is held criminally liable for disposition of such waste.⁶⁵ Correspondingly, any person who knew or should have known that an agent or employee illegally disposed of demolition or solid waste during the course of employment is guilty of conspiracy.⁶⁶

In addition to regulating the disposal of construction materials, Missouri's new law encourages recycling by eliminating the disposal of certain forms of solid waste.⁶⁷ Major appliances and waste oil are banned from solid waste disposal areas.⁶⁸ As of January 1, 1992, this ban will also include yard wastes.⁶⁹ By banning certain items from landfills, the law seeks to conserve landfill space, energy, and natural resources.

For analogous reasons, Missouri's new law establishes collection and recycling programs for lead-acid batteries and tires. Beginning in 1991, consumers must deliver these items to a recycling facility or collection center for ultimate disposal.⁷⁰ The law's mandate regarding tires subjects violators to criminal penalties.⁷¹ Further, the law imposes a fifty-cent fee for each new tire sold.⁷² Among other things, the proceeds of

sanitary landfill is a "solid waste disposal area which accepts commercial and residential solid waste." *Id.* § 260.200(29).

64. *Id.* § 260.210.6. The demolition waste disposal provisions also require cities and counties to place the following notice on all building permits:

Notice: The disposal of demolition waste is regulated by the department of natural resources under chapter 260, RSMo. Such waste, in types and quantities established by the department, shall be taken to a demolition landfill or a sanitary landfill for disposal.

Id. § 260.210.7.

65. *Id.* § 260.211.1-4. If a person disposes of more than 2000 pounds or 400 cubic feet of demolition waste, he is guilty of a class A misdemeanor and subject to a fine not to exceed \$20,000. If the amount of demolition waste disposed of is less than 2000 pounds, he is guilty of a class C misdemeanor. *Id.*

66. *Id.* § 260.212.9. Conspiracy is defined in MO. REV. STAT. § 564.016 (1986).

67. *See, e.g.,* MO. REV. STAT. § 260.250 (Supp. 1990); *see also supra* note 52 for the definition of recycling.

68. MO. REV. STAT. § 260.250.1 (Supp. 1990).

69. *Id.* Similarly, after Jan. 1, 1991, energy recovery is required upon the incineration of waste oil. MO. REV. STAT. § 260.250.2 (Supp. 1990).

70. *Id.* §§ 260.260.2, .270.1.

71. *Id.* § 260.270.1. An initial violation constitutes a class C misdemeanor while all subsequent violations constitute a class A misdemeanor. *Id.*

72. *Id.* § 260.273.1. Tire retailers will collect the fee and forward it to the Department of Revenue. *Id.*

this fee will be used to provide grants for the use of recycled tires.⁷³ Similarly, the law demands that battery retailers provide an exchange program for their customers.⁷⁴

Instead of criminalizing consumer disposal of newspapers, the law places demands on newspaper publishers. Beginning in 1993, Missouri newspapers must use recycled newsprint in their publications according to guidelines set forth in the new law.⁷⁵ In addition, Missouri newspaper publishers must file a yearly statement with the Missouri Department of Natural Resources certifying the total amount of newsprint used and document the percentage of recycled newsprint used.⁷⁶ If a newspaper does not meet the content requirements for recycled newsprint use, the publisher must include a statement explaining why it failed to do so.⁷⁷ A publisher who fails to file a statement or who files a misleading or deceptive statement is subject to a fine for each day the violation continues.⁷⁸

Finally, Missouri's new law provides for further regulation and reduction of solid waste disposal through the creation of solid waste management regions and districts.⁷⁹ Each district must submit a solid waste management plan⁸⁰ allowing for the collection of recyclable materials, the separation of household waste and small quantities of hazardous waste, the reduction of solid waste disposal in sanitary landfills, and the collection of compostable materials.⁸¹ The Missouri De-

73. *Id.* § 260.273.3-4.

74. *Id.* § 260.262.1 (1990). Retailers must post a written notice informing customers of the exchange program. *Id.* § 260.262.1(2). The law then allows the retailer 90 days to remove the batteries from the collection point. *Id.* § 260.266.1. See *supra* note 57 and accompanying text discussing lead-acid batteries.

75. MO. REV. STAT. § 260.255 (Supp. 1990). Newspapers with an average daily distribution over 15,000 must meet the following recycled newsprint content schedule: 10% in 1993; 20% in 1994; 30% in 1995; 40% in 1996; and 50% in 2000 and subsequent years. *Id.* § 260.255.2.

76. *Id.* § 260.255.1.

77. *Id.* § 260.255.3.

78. *Id.* The maximum fine is \$100.00 for each day the violation continues. The publisher may avoid being fined by obtaining a waiver from the Missouri Department of Natural Resources. *Id.*

79. *Id.* § 260.300.1. A solid waste management area is "a solid waste disposal area which also includes one or more of the functions contained in the definitions of recycling, resource recovery facility, waste tire collection center, waste tire processing facility, waste tire site or solid waste processing facility, excluding incineration." *Id.* § 260.200(28).

80. *Id.* § 260.325.1-3.

81. *Id.* § 260.325.4.

partment of Natural Resources is empowered to allocate monies to the solid waste management regions for recycling programs and other environmental programs outlined in the solid waste management plan.⁸²

III. STATE SURVEY OF SOLID WASTE MANAGEMENT LEGISLATION

Other states have enacted similar legislation to regulate and reduce solid waste disposal.⁸³ Like Missouri, Florida mandates the use of recycled newsprint and regulates the disposal of tires and lead-acid batteries.⁸⁴ To conserve landfill space and encourage recycling, Florida's law instructs local governments to reduce the trash they dump by thirty percent in the next five years.⁸⁵ If cities and counties fail to comply, the state may cut off funds.⁸⁶ Further, the law encourages recycling through the imposition of taxes and fees on certain products and materials.⁸⁷ The Florida law also regulates the manufacture of certain materials. For example, the law provides that plastic shopping bags used by retailers must degrade in the environment within 120 days.⁸⁸

Going even further than Florida's encouragement of source reduction and recycling, California recently enacted solid waste management laws⁸⁹ that establish a state corporate tax credit for investments in ma-

82. *Id.* § 260.335. The new law does not require counties to join or form a solid waste management region. However, it does provide various monetary incentives to those who do. *Id.*

83. *See infra* notes 84-88 and accompanying text for a discussion of Florida's Resource Recovery and Management Statute and notes 89-92 and accompanying text for a discussion of California's recently enacted solid waste management laws.

84. FLA. STAT. §§ 403.7195, .717, .708 (Supp. 1991).

85. FLA. STAT. § 403.7197 (Supp. 1991).

86. *Id.*

87. The Florida statute places a fee on each new motor vehicle tire and new or remanufactured lead-acid battery sold at retail. The retailers forward the fee to the State's Department of Revenue where it will be transferred into the appropriate fund. *Id.* §§ 403.718, .7185. Similarly, Florida's statute imposes a product disposal fee of \$.10 per ton of newsprint consumed on every producer or publisher within the state. *Id.* § 403.7195.

88. *Id.* § 403.708(10)(a).

89. CAL. PUB. RES. CODE § 40,000-49,620 (West Supp. 1991). The California Legislature found that "Californians disposed of over 38 million tons of solid waste, . . . more than 1,500 pounds of waste per person" in 1988. *Id.* § 40,000(a). Further, it predicted that "California will exhaust most of its remaining landfill space by the mid-1990's." *See also* Current Developments, *California: Governor Signs Package of Legislation Designed to Attack Solid Waste Problem*, 20 *Env't'l Rep.* (BNA) 1018 (1990).

chinery or equipment that use secondary waste material to manufacture finished products.⁹⁰ California also offers a personal income tax credit.⁹¹ In addition, the new legislation promotes the recycling of paper, metal, glass products, and tires, as well as the composting of organic wastes.⁹²

IV. UNIFORM WASTE MANAGEMENT PROPOSAL

Although RCRA provides states some encouragement through its financial and technical assistance⁹³ and some states have taken the initiative to implement innovative laws,⁹⁴ a uniform and updated method of solid waste management is needed. First, the federal guidelines for solid waste management should be mandatory. Unlike the mandated adoption of hazardous waste guidelines,⁹⁵ RCRA merely provides financial incentives for compliance with solid waste disposal guidelines.⁹⁶ At a minimum, states should be required to submit

90. CAL. REV. & TAX CODE § 23,612.5 (West Supp. 1991). This law, proposed in California's Assembly, was signed by Governor George Deukmejian on Sept. 29, 1989. It provides a 40% tax credit for the purchase of equipment used to manufacture finished products composed of a specified amount of secondary waste material and post consumer waste. *Id.* § 23,612.5(d). The credit may not exceed \$250,000. *Id.* § 23,612.5(c)(4).

91. *Id.* § 17,052.14. The statute allows for a "credit against the 'net tax' (as defined in section 17,039), an amount equal to 40 percent of the cost of qualified property purchased on or after January 1, 1989, and before January 1, 1994." *Id.* § 17,052.14(a)(1). Qualified property includes machinery or equipment used "exclusively to manufacture finished products composed of at least 50 percent secondary waste material . . . such as de-inking equipment . . . and equipment utilized to reclaim plastic." *Id.* § 17,052.14(d)(1).

The City of Seattle, Washington, has adopted its own tax incentive program to encourage recycling. The city ordinance, commonly referred to the "pay as you throw" law, replaces the portion of residents' property taxes that provided trash collection with a charge per pound of garbage collected. To avoid paying for the collection of heavy glass, plastic, and aluminum products, the ordinance encourages residents to separate their trash and dispose of recyclables at the appropriate recycling center. The effects include lower property taxes, increased conservation of landfill space, and increased product recycling thus saving energy and natural resources.

92. CAL. PUB. RES. CODE §§ 40,000-49,620 (West Supp. 1991); CAL. PUB. CONT. CODE §§ 121,150-12,226 (West Supp. 1991).

93. See *supra* notes 15-40 and accompanying text for a discussion of incentives provided by RCRA.

94. See *supra* notes 51-92 and accompanying text for a discussion of state solid waste laws.

95. 42 U.S.C. §§ 6921-6934 (1988).

96. *Id.* §§ 6947-6949. See *supra* note 91.

comprehensive plans to the EPA. The federal government should establish federal permits for the handling, treatment, and disposal of solid waste which mirror those needed for handling hazardous waste. Such a prerequisite would ensure conservation of natural resources and landfill space as well as address the health and safety concerns regarding solid waste disposal.

Second, the federal guidelines should provide a means by which to enforce solid waste disposal guidelines. RCRA sanctions the violation of hazardous waste disposal regulations.⁹⁷ Missouri's law follows RCRA's provisions and criminalizes violations of the new solid waste disposal guidelines.⁹⁸ The federal government's only authority over the states' solid waste disposal plans⁹⁹ is to withhold technical and financial assistance.¹⁰⁰ However, because financial assistance for state solid waste management programs has been minimal in recent years, the denial of funds does not serve as an incentive for states to take action. Therefore, the federal government has virtually no control over solid waste disposal.

As noted, a limited supply of landfill space and raw materials provide the major incentive for new solid waste disposal legislation. Because of the voluntary nature of federal and some state laws, many states have ignored the increasing problems associated with solid waste disposal. Despite available financial and technical assistance, those states do not engage in any affirmative measures to help alleviate the problem. Thus, in order to remedy the problem and to increase participation in solid waste management, legislatures must provide better incentives and mandatory regulations.

Alternative legislative incentives can take many forms. For example, state governments could provide tax incentives or low interest loans for persons who assist in the achievement of the legislative objectives. Industries which return materials to a usable form or which utilize recycled material in the manufacture of their product would avoid the creation of a "recycling illusion." The governments could also establish criminal penalties for persons who violate the regulations and thus, defeat its objectives. Fines paid by violators would be used to further the objectives of the legislation.

97. 42 U.S.C. § 6928 (1988).

98. See *supra* notes 51-82 and accompanying text for a discussion of Missouri's solid waste disposal laws criminalizing violations.

99. 42 U.S.C. §§ 6946-6947 (1988).

100. *Id.* §§ 6947-6949.

Finally, in addition to incentives, state governments must adopt more extensive solid waste management legislation. Any new guidelines should focus on conserving the remaining landfill space, recycling, and developing waste-to-energy facilities. Together with improved incentives, these suggestions should result in comprehensive solid waste management laws.

*Beverly S. Davis**

* J.D. 1991, Washington University.

