

# **SLOWING THE RUSH TO BURN: THE NEED TO REVISE FEDERAL MUNICIPAL SOLID WASTE POLICY TO PRIORITIZE RECYCLING OVER INCINERATION**

## **INTRODUCTION**

The United States generates more municipal solid waste ("MSW") per capita than any other nation.<sup>1</sup> At the same time, many parts of the country are running out of disposal space.<sup>2</sup> In response to this dilemma, states and communities across the nation have resorted to waste management methods that reduce pressure on diminishing landfill space. Two such methods which have become popular are recycling and incineration.

In comparing the effectiveness of recycling and incineration, the Environmental Protection Agency ("EPA") ranks recycling as the preferred option because it avoids the environmental and economic costs associated with incineration.<sup>3</sup> Ironically, federal, state, and local policies have provided significantly more encouragement for incineration.<sup>4</sup> As a result, the volume of MSW burned annually in incinerators has risen dramatically over recent years, and construction of seventy-two additional incinerators is expected to begin by the year 2000.<sup>5</sup>

In 1992, EPA Administrator Carol Browner, then acting in her capacity as Secretary of the Florida Department of Environmental Regulation, publicly explained that Florida's long-time encouragement of incineration was "bumping heads" with

---

1. J. Winston Porter, *Introduction to THE SOLID WASTE DILEMMA: AN AGENDA FOR ACTION*, EPA/530-SW-89-019 (Feb. 1989) [hereinafter *THE SOLID WASTE DILEMMA*].

2. *THE SOLID WASTE DILEMMA*, *supra* note 1, at 8.

3. Standards of Performance for New Stationary Sources: Municipal Waste Combustors, 59 Fed. Reg. 48,198, 48,220 (1994) [hereinafter 1994 Proposed NSPS].

4. David Littell, Note, *The Omission of Materials Separation Requirements from Air Standards for Municipal Waste Incinerators: EPA's Commitment to Recycling Up in Flames*, 15 HARV. ENVTL. L. REV. 601, 619-621 (1991) (discussing several factors which have encouraged greater reliance upon incineration than recycling).

5. In 1989, the EPA reported that approximately nine percent of all MSW was burned in incinerators. *THE SOLID WASTE DILEMMA*, *supra* note 1, at 23. In 1990, that figure grew to 16.3%, with approximately 31.9 million tons of MSW being burned. CHARACTERIZATION OF MUNICIPAL SOLID WASTE IN THE UNITED STATES: 1992 UPDATE, EPA/530-R-92-019, ES-5 (July 1992) [hereinafter 1992 UPDATE]. The anticipated construction of 72 new incinerators will provide an additional burning capacity of 19.4 million tons of MSW per year. *Proposal on Municipal Waste Incinerators Covers More Pollutants, Smaller Facilities*, 25 Env't. Rep. (BNA) 4, 155 (May 27, 1994).

efforts to reduce pollution levels through recycling.<sup>6</sup> Consequently, Browner recommended a moratorium on the construction of new incinerators in Florida.<sup>7</sup> Consistent with Browner's analysis, this note contends that federal MSW management policies should be revised to favor recycling and halt our Nation's growing dependence on incineration. Part I provides background information explaining why recycling is more favorable than incineration as a means of managing MSW. Part II discusses current federal policy for managing MSW. Part III outlines recent congressional and administrative proposals which would affect the current relationship between recycling and incineration, and part IV evaluates the potential effectiveness of these proposals. Finally, this note concludes with an overall assessment of current federal waste management policy and advocates that such policy be revised to encourage recycling and minimize the role of MSW incineration.

## I. BACKGROUND

As previously stated, the EPA favors recycling over incineration as a means of effectively managing MSW.<sup>8</sup> In evaluating the effectiveness of these waste management methods, three considerations support the EPA's preference for recycling: environmental costs, economic costs, and the manner in which these inherently conflicting waste management options affect one another. The following discussion briefly addresses each of these considerations.

### A. *Environmental Costs*

According to the EPA, recycling is the preferred waste management method to "reduce potential risks to human health and the environment."<sup>9</sup> Although recycling may cause pollution, the EPA has concluded that it generally creates less pollution than manufacturing the same materials from virgin sources.<sup>10</sup>

---

6. *State Environmental Chief Vows to Seek Moratorium on New Municipal Incinerators*, 22 Env't. Rep. (BNA) 40, 2308 (Jan. 31, 1992).

7. *Id.*

8. 1994 Proposed NSPS, *supra* note 3, at 48,220.

9. *Id.*

10. Littell, *supra* note 4, at 602.

Therefore, recycling can actually have the effect of minimizing adverse environmental impacts.

To the contrary, incineration has significant adverse effects on human health and the environment. Perhaps the most obvious adverse effect is that burning MSW produces toxic air emissions. Specifically, MSW incinerators commonly emit carbon monoxide, nitrogen oxides, hydrocarbons, and chlorinated hydrocarbons (including dioxins).<sup>11</sup> They also emit heavy metals, such as mercury and lead, and acid gases.<sup>12</sup> Such emissions can result in direct human exposure through inhalation and dermal contact<sup>13</sup> and in indirect human exposure through the ingestion of plants, dairy products, and fish.<sup>14</sup>

Another adverse effect associated with MSW incineration is that it produces residual ash.<sup>15</sup> This form of waste is problematic for two reasons. First, because the combustion process often causes toxic materials to become concentrated in the residual ash,<sup>16</sup> such ash may contain high levels of heavy metals and organic compounds.<sup>17</sup> Second, MSW incinerator ash is difficult to manage.<sup>18</sup> By transforming waste into smaller particles, thereby increasing the waste's surface area, incineration makes toxic substances more bioavailable, allowing such

---

11. OFFICE OF TECHNOLOGY AND ASSESSMENT, *FACING AMERICA'S TRASH: WHAT NEXT FOR MUNICIPAL SOLID WASTE?* 226 (OTA-0-24, Oct. 1989).

12. *Id.*

13. See H.R. 2488, 103rd Cong., 1st Sess. § 2 (1993).

14. *New EPA Risk Guidance May Double Overall Risk Attributed to Incinerators*, *Env'tl. Pol'y Alert*, 2-3 (Oct. 13, 1993) [hereinafter *New EPA Risk Guidance*]; see also Littell, *supra* note 4, at 609. According to the EPA, indirect pathways may constitute 70 to 80% of the exposure from MSW incinerators. *New EPA Risk Guidance, supra*, at 3.

15. RECYCLING AND INCINERATION: *EVALUATING THE CHOICES* 177 (Richard A. Denison & John Ruston eds., 1990) [hereinafter RECYCLING AND INCINERATION]. Incineration produces two types of ash: fly ash, which is ash trapped in pollution control devices in the stack, and bottom ash, which is residual matter found in the combustion chamber. *Id.* Generally, both forms of ash are mixed together for disposal. *Id.* Although figures vary from one facility to another, the average incinerator produces 25 tons of residual ash for every 100 tons of waste burned. 1992 UPDATE, *supra* note 5, at 3-3. These figures are by dry weight. *Id.*

16. RECYCLING AND INCINERATION, *supra* note 15, at 177.

17. *Id.* A 1990 study co-sponsored by the EPA and the Coalition on Resource Recovery and the Environment concluded that "[a]sh frequently fails EPA-approved tests for determining whether wastes are regulated as hazardous, because it leaches lead and cadmium at levels of concern." *Municipal Waste Combustion ("MWC") Ash; Characterization of MWC Ashes, Extracts, and Leachates From MWC Ash Disposal Units*, 55 Fed. Reg. 17,303 (1990).

18. RECYCLING AND INCINERATION, *supra* note 15, at 177.

substances to leach more easily into the groundwater.<sup>19</sup> Accordingly, MSW incineration essentially converts unprocessed MSW into a new, more hazardous form of waste.

By recycling waste rather than burning it, the significant environmental costs associated with incineration can be avoided. Furthermore, recycling can slow the depletion of natural resources by causing waste materials to be re-processed and re-used rather than destroyed.<sup>20</sup> For these reasons, recycling is environmentally superior to incineration.

### B. Economic Costs

The EPA's preference for recycling is also based on economic considerations.<sup>21</sup> Incinerators require enormous capital expenditures, ranging anywhere from \$50 million<sup>22</sup> to \$600 million.<sup>23</sup> Compared to recycling, these costs are extremely high. For example, a successful recycling program in place of a small, \$50 million incinerator can operate on a budget ranging from \$100,000 to \$250,000.<sup>24</sup> Two cost-benefit studies comparing incineration programs to proposed recycling programs in New York found recycling to be preferable to incineration.<sup>25</sup> Another study, analyzing several different waste management options, found recycling by way of source separation and composting to be economically and environmentally superior to landfilling and incineration.<sup>26</sup> As these studies suggest, economic considerations make recycling more favorable than incineration.

---

19. *Id.*

20. 1994 Proposed NSPS, *supra* note 3, at 48,220.

21. *Id.*

22. Susan M. Komo-Kim, Comment, *Municipal Waste Combustion: A Wasted Investment?* 12 U. HAW. L. REV. 153, 174 (1990).

23. Peter H. Kostmayer, *Incinerators: A Problem, Not a Solution*, N.Y. TIMES, Sept. 21, 1991, at A21.

24. Komo-Kim, *supra* note 22, at 174.

25. James Michael Orange, *Garbage Incineration and the Hennepin County Incinerator*, 9 HAMLINE J. PUB. LAW & POL'Y 1, 38-40 (1988).

26. *Id.* at 41 (citing BERNDT FRANKE, INSTITUTE FOR ENERGY AND ENVIRONMENTAL RESEARCH, TRASH-RECYCLING, COMPOSTING, OR INCINERATION? Table 2 (1986)).

*C. The Effects of Recycling and Incineration upon One Another*

As many communities in the United States have already learned, recycling and incineration can be grossly incompatible.<sup>27</sup> This incompatibility stems from the fact that an incinerator requires a fixed volume of waste, much of which is recyclable, to operate profitably.<sup>28</sup> As a result, most contracts between incinerator operators and waste-supplying entities establish tonnage quotas—specific volumes of waste that must be supplied to the incinerator.<sup>29</sup> In the event that the waste-supplying entity fails to meet its tonnage quota, such contracts typically provide for penalties to be levied against the waste-supplier.<sup>30</sup> Because these contracts generally last for the lifetime of the facility, they usually commit the waste-supplier to providing a fixed amount of waste for a period of twenty to thirty years.<sup>31</sup> Accordingly, a waste-supplier's subsequent efforts to reduce waste through recycling can be extremely costly. For example, in 1991, eight Massachusetts communities paid \$748,324 in penalties to a single incinerator operator because, as a result of state mandated recycling, they failed to provide enough waste for incineration.<sup>32</sup> Similarly, in 1989, a nine month waste shortfall cost Warren County, New Jersey \$1.8 million in penalties.<sup>33</sup> As these examples illustrate, the contractual commitments which typically accompany a new incinerator may make recycling and other waste reduction efforts economically devastating<sup>34</sup> or may discourage communities from recycling in the first place.<sup>35</sup>

In sum, incineration is more costly than recycling—both from an environmental and economic perspective—and it can lock communities into long-term, costly commitments which ultimately discourage waste reduction. Consequently, the EPA's preference for recycling is a logical one. Therefore, current federal waste management policy, which has allowed the increased proliferation

---

27. Thomas F. Irwin, *Up in Smoke*, AUDUBON, Apr. 1992, at 34.

28. *Id.* at 34-35.

29. RECYCLING AND INCINERATION, *supra* note 15, at 233.

30. *Id.*

31. See Irwin, *supra* note 27, at 34.

32. *Id.*

33. *Id.* at 35.

34. *Id.*

35. Orange, *supra* note 25, at 43.

of incinerators, should be revised to reflect such a preference for recycling.

## II. CURRENT FEDERAL POLICY

Federal solid waste management is governed by the Resource Conservation and Recovery Act ("RCRA"), a statute enacted in 1976 to aid in the management of both hazardous and non-hazardous solid wastes.<sup>36</sup> Congress enacted RCRA largely in response to dwindling disposal space and the environmental problems associated with landfilling.<sup>37</sup> Accordingly, Congress intended RCRA to encourage "alternatives to existing methods of land disposal."<sup>38</sup> In encouraging such alternatives, however, Congress indicated no preference between recycling and incineration. Rather, the only guidance Congress provided in RCRA regarding the relationship between recycling and incineration is that recycling should be taken into account when determining the size of incinerators.<sup>39</sup>

Despite its failure to enunciate a clear policy regarding the relationship between recycling and incineration, Congress has directly favored incineration in one important way: by providing economic protection for the incinerator industry. For example, by enacting Section 3001(i) of RCRA, a 1984 amendment entitled "Clarification of household waste exclusion,"<sup>40</sup> Congress

36. 42 U.S.C. §§ 6901-6992k (1988).

37. Congress's concern over land disposal is evident in § 1002 of RCRA, entitled "Congressional findings." 42 U.S.C. § 6901(b).

38. 42 U.S.C. § 6901(b)(8).

39. 42 U.S.C. §§ 6941, 6943(d).

40. 42 U.S.C. § 6921(i). The "Clarification of household waste exclusion" provides:

A resource recovery facility recovering energy from the mass burning of municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under [Subtitle C], if—

(1) such facility—

(A) receives and burns only—

(i) household waste (from single and multiple dwellings, hotels, motels, and other residential sources), and

(ii) solid waste from commercial or industrial sources that does not contain hazardous waste identified or listed under this section, and

(B) does not accept hazardous wastes identified or listed under this section, and

(2) the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.

effectively shielded the MSW incinerator industry from the more complex, more costly regulations of Subtitle C of RCRA.<sup>41</sup> The report of the Senate Committee recommending enactment of Section 3001(i) emphasized the importance of insuring the commercial viability of MSW incineration.<sup>42</sup> No comparable protection, however, has been extended to encourage recycling. To the contrary, federal policy has historically encouraged production from virgin materials rather than recycled materials.<sup>43</sup>

Congress also has favored incineration indirectly, by allowing mechanisms on the state and local levels to encourage incineration at the expense of recycling.<sup>44</sup> According to RCRA's objectives, the federal government and the states are to operate as partners for purposes of managing solid waste.<sup>45</sup> In the context of MSW management (as opposed to hazardous waste management), RCRA's partnership philosophy requires that states develop their own solid waste management plans according to guidelines promulgated by the EPA,<sup>46</sup> and that the EPA maintain authority to approve or disapprove proposed state plans.<sup>47</sup> This partnership approach to managing MSW has been criticized because of "poor national leadership" on the part of the EPA.<sup>48</sup> Thus far, the operation of the federal-state partnership has permitted mechanisms on the state and local levels to encourage increased reliance on incineration.

In light of the EPA's official recognition of recycling as the more favorable means of managing MSW, it is disturbing that federal policies have operated in such a way as to prefer incineration. Accordingly, current federal waste management policy should be revised. The following section discusses recent

---

*Id.*

41. Subtitle C of RCRA provides a cradle-to-grave regulatory scheme for the management of wastes deemed hazardous by the EPA. 42 U.S.C. §§ 6921-6939e (Supp. 1994).

42. S. REP. NO. 284, 98th Cong., 1st Sess. 61 (1983).

43. Littell, *supra* note 4, at 621.

44. RECYCLING AND INCINERATION, *supra* note 15, at 163-64. Such mechanisms include state fiscal policies, subsidies, property tax abatements, and donations of public land. *Id.*

45. 42 U.S.C. § 6902(a)(7).

46. 42 U.S.C. § 6942.

47. 42 U.S.C. § 6947.

48. Marylou Scofield, Note, *RCRA Reauthorization: Moving the Incineration Issue to the Front Burner*, 3 FORDHAM ENVTL. L. REP. 183, 188 (1992).

congressional and administrative proposals which could have the effect of improving current federal policy.

### III. RECENT PROPOSALS TO INFLUENCE THE RELATIONSHIP BETWEEN RECYCLING AND INCINERATION

Proposals concerning the relationship between recycling and incineration were introduced recently both in Congress and in the EPA's rule-making process. On the congressional level, Representative William Richardson of New Mexico introduced a bill ("the Richardson bill") which would have established a strong preference for recycling over incineration while making waste burning safer for human health and the environment.<sup>49</sup> On the administrative level, the EPA has proposed a rule which, among other things, would require owners and operators of new MSW incinerators to develop plans for the diversion of some recyclable wastes away from incineration.<sup>50</sup> The following discussion first addresses congressional proposals to reduce the role of incineration by favoring recycling and other waste reduction strategies. It focuses primarily upon the major provisions of the Richardson bill. The discussion then turns to administrative proposals, focussing on the EPA's most recent, currently pending proposed rule. The approaches proposed by the Richardson bill and the EPA are subsequently evaluated in part IV.

#### A. Congressional Proposals

In 1991, Representative Peter Kostmayer of Pennsylvania introduced the Pollution Prevention, Community Recycling, and Incinerator Control Act ("the Kostmayer bill"), a proposed amendment to Subtitle D of RCRA.<sup>51</sup> Concerned largely with the adverse effects of incineration upon human health and the environment, the Kostmayer bill aimed to create a federal policy favoring waste reduction over incineration while at the same time making waste incineration safer. Its key provisions included a moratorium on the construction of new MSW incinerators until the year 2000;<sup>52</sup> permit requirements for the construction of new

---

49. H.R. 2488, 103rd Cong., 1st Sess. (1993).

50. 1994 Proposed NSPS, *supra* note 3, at 48,198, 48,221.

51. H.R. 3253, 102d Cong., 1st Sess. (1991).

52. *Id.* § 2.

MSW incinerators after the year 2000;<sup>53</sup> classification of MSW incinerator ash as a hazardous waste and guidelines for its safe disposal;<sup>54</sup> a prohibition on incineration of certain materials;<sup>55</sup> and permit requirements for the construction of new hazardous waste incinerators.<sup>56</sup> The House Energy and Commerce Committee, however, defeated the Kostmayer bill by a vote of seventeen to seven.<sup>57</sup>

Nevertheless, in 1993, Representative Richardson introduced H.R. 2488, a bill based largely on the Kostmayer bill.<sup>58</sup> Entitled the Pollution Prevention and Incineration Alternatives Act of 1993, the Richardson bill similarly aimed to establish a federal policy favoring waste reduction over incineration, and making incineration safer for human health and the environment. Similar to the Kostmayer bill, the key provisions of the Richardson bill included a moratorium on the construction of new MSW incinerators;<sup>59</sup> permit requirements for the construction of new MSW incinerators following expiration of the moratorium;<sup>60</sup> guidelines for the safe disposal of MSW incinerator ash;<sup>61</sup> a prohibition of specific materials from incineration;<sup>62</sup> and permit requirements for the construction of new hazardous waste incinerators.<sup>63</sup> Additionally, the Richardson bill sought to protect environmental equity concerns by ensuring that new

---

53. *Id.*

54. *Id.* § 3.

55. *Id.* § 4.

56. *Id.* § 5.

57. *House Committee Approves Interstate Waste, Local Impact Statement Amendments to RCRA Bill*, 23 *Env't. Rep.* (BNA) 9 at 700 (June 26, 1992).

58. H.R. 2488, 103d Cong., 1st Sess. (1993).

59. *Id.* § 2.

60. *Id.*

61. *Id.* § 3. Unlike the Kostmayer bill, the Richardson bill did not seek to classify MSW incinerator ash as a hazardous waste. *Id.* Considering the problems associated with MSW incinerator ash, it is the opinion of the author that the Richardson bill's failure to seek classification of MSW incinerator ash as a hazardous waste is a shortcoming. See *supra* notes 15-19 and accompanying text. Fortunately, this shortcoming may be irrelevant because of the U.S. Supreme Court's recent decision interpreting section 3001(i) of RCRA as *not* excluding MSW incinerator ash from regulation as a hazardous substance. *City of Chicago v. Env't'l Defense Fund*, 114 S.Ct. 1588 (1994).

62. H.R. 2488 § 4.

63. *Id.* § 5.

incinerators would not have a disproportionate impact on minority and low income communities.<sup>64</sup>

When the 103rd Congress adjourned, the House Energy and Commerce Committee had not voted on the Richardson bill. Accordingly, the bill must be re-introduced if it is to be given congressional consideration.<sup>65</sup> Whether or not the bill is re-introduced, however, Representative Richardson's approach offers a valuable model for encouraging recycling and reducing the role of MSW incineration. Accordingly, the following discussion outlines those portions of the bill which relate to the relationship between recycling and incineration.

The Richardson bill employed two mechanisms which create a clear policy preference for recycling over incineration. As its first mechanism, it proposed a moratorium on the construction and expansion of MSW incinerators through December 31, 1996.<sup>66</sup> Such a moratorium was intended to serve as a "time out" during which states and regional planners could develop waste management plans without further interference from new waste-burning facilities.<sup>67</sup> Specifically, the bill would have required all states to conduct an incinerator capacity study by 1995.<sup>68</sup> As part of this study, states would have determined whether, after diverting all recyclables, compostables, and non-combustibles, they needed additional MSW incinerators.<sup>69</sup> The

---

64. *Id.* §§ 2, 5. Because minority and low income communities typically wield less political power, these communities have become targets for incinerator companies seeking to site new facilities. LOUIS BLUMBERG & ROBERT GOTTLIEB, *WAR ON WASTE: CAN AMERICA WIN ITS BATTLE WITH GARBAGE?* 58-60 (1989). This phenomenon is no surprise, considering that minority and poor communities bear a disproportionate burden of our nation's environmental hazards. Steven Keeva, *A Breath of Justice*, A.B.A. J., Feb. 1994, at 88 (discussing the developing relationship between environmentalists and civil rights advocates in the movement for environmental equity). For in-depth discussions of environmental equity issues, see e.g., Rachel D. Godsil, Note, *Remedying Environmental Racism*, 90 MICH. L. REV. 394 (1991); Paul Mohai & Bunyan Bryant, *Environmental Injustice: Weighing Race and Class as Factors in the Distribution of Environmental Hazards*, 63 U. COLO. L. REV. 921 (1992).

65. Considering that the Richardson bill had the support of 93 co-sponsors when the 103rd Congress adjourned, and that Representative Richardson was re-elected on November 8, 1994, it is likely that the bill will be re-introduced in the 104th Congress.

66. H.R. 2488 § 2.

67. *House Members Introduce Legislation to Bar New Incinerators Until 1997*, 31 Air Water Pollution Rep. 26 (June 28, 1993). See *supra* notes 27-35 and accompanying text for a discussion of the way in which MSW incineration impedes waste reduction efforts.

68. H.R. 2488 § 2.

69. *Id.*

bill also would have required the EPA to complete a national capacity study based upon the capacity studies of the individual states.<sup>70</sup> In this manner, the Richardson bill's moratorium would have provided the opportunity for states and the EPA to assess the need for new MSW incinerators *after* taking into account waste reduction methods such as recycling.

As its second mechanism for favoring waste reduction over incineration, the Richardson bill proposed several permit requirements for the construction of new incinerators following expiration of the moratorium. Such permit requirements would have strongly encouraged waste reduction strategies such as recycling, while at the same time minimizing the role of MSW incineration. For example, the bill would have required a permit applicant to demonstrate that the waste to be incinerated at the applicant's proposed facility could not feasibly be managed by alternative means, such as source reduction, re-use, and recycling.<sup>71</sup> The bill also would have required that each entity planning to supply waste to a proposed MSW incinerator demonstrate that it had diverted a certain percentage of its waste stream "to waste management methods other than incineration and landfilling."<sup>72</sup> Specifically, the bill would have required waste-supplying entities to divert annually from incineration and landfilling, beginning in the year 2000, at least sixty-five percent of all paper and glass, eighty percent of all metals, fifty percent of all plastic containers, ninety percent of all yard waste, and ten percent of all food waste.<sup>73</sup> During the interim years, the EPA would have been required to establish incremental diversion rates for 1997, 1998, and 1999.<sup>74</sup> Permit applicants would have been required to demonstrate that their proposed facility would not interfere with the diversion rates of each waste-supplying entity and, in cases in which higher diversion rates had been achieved, that the proposed facility would not interfere with those higher rates.<sup>75</sup>

---

70. *Id.* Following expiration of the proposed moratorium, permits for new MSW incinerators would not have been granted if the state, within which the facility was to be sited, had failed to conduct its required capacity study or if the EPA had failed to conduct the national capacity study. *Id.*

71. *Id.*

72. *Id.*

73. *Id.*

74. *Id.*

75. *Id.*

By employing the two mechanisms discussed above—a moratorium providing the opportunity for effective waste management planning, and strict permit requirements for the construction of new facilities—the Richardson bill enunciated a policy clearly favoring waste reduction methods, such as recycling, over incineration. Accordingly, although the Richardson bill is not presently pending before Congress, it serves as a valuable model for improving current federal waste management policy.

### *B. Administrative Proposals*

In 1989, the EPA proposed two rules regarding the operation of MSW incinerators.<sup>76</sup> One proposed rule, the Emission Guidelines, applied to existing MSW incinerators, while the other, the New Source Performance Standards ("NSPS"), applied to new facilities.<sup>77</sup> Both proposed rules contained emission standards.<sup>78</sup> Significant to the relationship between recycling and incineration, both proposed rules also contained a materials separation requirement.<sup>79</sup> Such requirement would have compelled MSW incinerator operators to reduce their waste streams by at least twenty-five percent through the separation and diversion of various recyclable materials.<sup>80</sup> Despite its prediction that a materials separation requirement "would encourage pollution prevention through source reduction and recycling,"<sup>81</sup> the EPA ultimately abandoned this requirement when, in 1991, it promulgated the Emission Guidelines and NSPS.<sup>82</sup>

---

76. Standards of Performance for New Stationary Sources; Municipal Waste Combustors, 54 Fed. Reg. 52,251 (1989); Emission Guidelines; Municipal Waste Combustors, 54 Fed. Reg. 52,209 (1989).

77. 54 Fed. Reg. 52,251; 54 Fed. Reg. 52,209.

78. 54 Fed. Reg. 52,251; 54 Fed. Reg. 52,209.

79. 54 Fed. Reg. 52,279; 54 Fed. Reg. 52,238.

80. 54 Fed. Reg. 52,279; 54 Fed. Reg. 52,238.

81. 54 Fed. Reg. 52,279; 54 Fed. Reg. 52,238.

82. Emission Guidelines; Municipal Waste Combustors, 56 Fed. Reg. 5514, 5521 (1991); Standards of Performance for New Stationary Sources; Municipal Waste Combustors, 56 Fed. Reg. 5488, 5496 (1991). See generally Littell, *supra* note 4, (discussing and criticizing the EPA's failure to promulgate its proposed materials separation requirement).

In September of 1994, the EPA proposed two new rules to replace the 1991 Emission Guidelines and NSPS.<sup>83</sup> The newly proposed rules would provide more stringent emission standards than their 1991 predecessors and would apply to a greater number of facilities.<sup>84</sup> The recently proposed NSPS also would provide requirements for siting new MSW incinerators.<sup>85</sup> Among those requirements, the proposed NSPS would require permit applicants, prior to applying for construction permits for new MSW incinerators, to develop materials separation plans.<sup>86</sup> According to the regulatory text of the proposed NSPS, such plans would "identif[y] both a goal and an approach to separate certain components of municipal solid waste for a given service area in order to make the separated materials available for recycling."<sup>87</sup>

The proposed NSPS would add several steps to the process of siting new MSW incinerators. Specifically, it would require a permit applicant to:

- submit to the public a preliminary draft materials separation plan for the area where the facility is to be constructed;
- hold public meetings and accept comments on the preliminary plan;
- publicly respond to comments and submit a final draft materials separation plan to the state or the EPA, as applicable;

---

83. Emission Guidelines: Municipal Waste Combustors, 59 Fed. Reg. 48,228 (1994) [hereinafter 1994 Proposed Emissions Guidelines]; 1994 Proposed NSPS, *supra* note 3, at 48,198. The recently proposed Emission Guidelines would apply to MSW incinerators for which construction, modification, or reconstruction began on or before September 20, 1994. 1994 Proposed Emission Guidelines, *supra*, at 48,228. The recently proposed NSPS would apply to MSW incinerators for which construction, modification, or reconstruction began after September 20, 1994. 1994 Proposed NSPS, *supra* note 3, at 48,198.

84. The 1991 rules apply only to MSW incinerators with burning capacities above 225 metric tons per day, whereas the proposed rules would apply to MSW incinerators with capacities greater than 35 metric tons per day. 1994 Proposed NSPS, *supra* note 3, at 48,205; 1994 Proposed Emission Guidelines, *supra* note 83, at 48,235.

85. 1994 Proposed NSPS, *supra* note 3, at 48,205.

86. *Id.* at 48,221.

87. EPA Docket A-70-45, Item II-B-50.

- provide a final opportunity for public review and comment on the final draft at a public meeting held for review of the approved siting; and
- submit the final materials separation plan with the initial notification of construction.<sup>88</sup>

The essential function of the EPA's proposed materials separation plan requirement is to ensure that communities take into account alternative waste management strategies—such as recycling—before committing a certain volume of waste to incineration.<sup>89</sup> Despite requiring this opportunity for communities to participate in the siting of new MSW incinerators, the proposed materials separation plan requirement would be largely procedural.<sup>90</sup> For instance, the EPA has not proposed substantive requirements that materials separation plans be designed to divert specific types or amounts of MSW.<sup>91</sup> Nor has the EPA proposed a requirement that such plans actually be implemented.<sup>92</sup>

Unlike its 1989 proposed materials separation requirement, the EPA's current proposal would not require actual materials separation; rather, it would only require permit applicants to develop *plans* to separate materials. Accordingly, the EPA's current proposal to divert materials from incineration is weaker than its 1989 proposal. Nevertheless, the EPA's latest proposal at least offers modest improvement of current federal policy for the management of MSW.

#### IV. AN EVALUATION OF THE RECENT PROPOSALS AND RECOMMENDATIONS FOR FEDERAL POLICY REVISION

Both Representative Richardson's approach and the EPA's proposed rule would improve current federal waste management policy. In the author's opinion, however, Representative

---

88. 1994 Proposed NSPS, *supra* note 3, at 48,221-22.

89. Telephone Interview with Walter Stevenson, Staff Engineer, U.S. EPA Office of Air Quality Planning and Standards, Emission Standards Division (Sept. 29, 1994).

90. *Id.*

91. 1994 Proposed NSPS, *supra* note 3, at 48,221.

92. *Id.* at 48,222. The proposed rule does, however, request comments on appropriate means by which to ensure that materials separation plans are implemented. *Id.*

Richardson's approach presents a much more significant improvement. This opinion is based on the Richardson bill's policy implications, its requirements for waste management planning, and its more aggressive goals.

With respect to the first of these factors, Representative Richardson's approach would effect a clear policy preference for recycling, thereby halting the continued expansion of incineration. This policy preference is manifested in the Richardson bill's proposed permit requirements. For example, under Representative Richardson's model, applicants for MSW incinerator permits would be required to demonstrate that their facilities would not interfere with the waste reduction efforts of waste-supplying entities.<sup>93</sup> Moreover, permit applicants would be required to demonstrate that the waste to be incinerated in their proposed facilities could not be managed feasibly through source reduction, re-use, or recycling.<sup>94</sup> As these substantive requirements make clear, the Richardson bill's approach would elevate recycling to a preferred status and permit new incinerators only as a last resort.

To the contrary, although the EPA's proposed materials separation plan requirement could prevent conflicts between recycling and incineration at least in the short-run,<sup>95</sup> it fails to establish a clear policy which favors recycling over incineration. To satisfy the EPA's proposed requirement, an incinerator operator or owner need only develop, with public participation, a materials separation plan. Nothing in the EPA's proposal would favor recycling over incineration in any way. Indeed, RCRA already provides that "in determining the size of [an incinerator], adequate provision shall be given to the present and reasonably anticipated future needs . . . of the recycling and resource recovery

---

93. H.R. 2488, 103rd Cong., 1st Sess. § 2 (1993).

94. *Id.*

95. The author acknowledges that by allowing communities to participate in the development of a materials separation plan before incinerators are constructed, it is less likely, in the short-run, that communities will make commitments to incinerators that they subsequently do not want to keep. Because communities cannot accurately foresee what recycling technology and recycling markets will be like in the future, the possibility is very real that communities will commit themselves to materials separation plans which, although ambitious at the time, may be meager in the future. Furthermore, it is important to note that the materials separation planning procedure will not protect communities that make commitments to an incinerator and are subsequently required by the state or some other government authority to divert more materials to recycling than initially planned.

interest within the area.<sup>96</sup> Therefore, except for providing a procedure for citizens to participate in the planning and design of new MSW incinerators, the proposed materials separation requirement would add nothing new to current federal policy.

The Richardson bill's approach is also superior to the proposed NSPS because it would require waste management planning. Specifically, under Representative Richardson's model, all levels of government would be required to actively participate in the development of waste management plans. As discussed in part III, local governments would be required to monitor their waste streams annually;<sup>97</sup> the states and the federal government would be required to complete capacity studies to assess the need for new MSW incinerators;<sup>98</sup> and the federal government would be responsible for establishing interim percentage goals for diverting waste from landfilling and incineration.<sup>99</sup> Furthermore, Representative Richardson's proposed moratorium would provide time during which waste management planning could be conducted without increased interference from new MSW incinerators coming on line. Similar moratoria have been implemented on the state level<sup>100</sup> and in Canada<sup>101</sup> as a means of establishing waste management plans. Indeed, even the EPA has employed such a measure to improve federal hazardous waste management policy.<sup>102</sup>

---

96. 42 U.S.C. §§ 6941, 6943(d) (1988).

97. H.R. 2488 § 2.

98. *Id.*

99. *Id.*

100. In 1988, Massachusetts placed a one-year moratorium on the licensing and construction of MSW incinerators as part of a waste reduction plan. Larry Tye, *State Turning Activist in Waste Disposal Effort: Plan Promotes Recycling, Waste Reduction*, BOSTON GLOBE, Nov. 4, 1988, at 23. Mississippi commenced a moratorium on April 2, 1990, to last either until July 1, 1992 or until a local management plan for nonhazardous waste gained state approval. MISS. CODE ANN. § 17-17-59 (Supp. 1993). Rhode Island implemented a ban on the construction of new MSW incinerators until the state achieves a 70% recycling rate. Sue Darcey, *Environmental Worries Spark State Burn Bans; Ban On Waste Incineration*, 36 WORLD WASTES at 12 (June, 1993). West Virginia, Alabama, and South Carolina have also implemented moratoria. *Id.*

101. Ontario implemented a moratorium on the construction of new MSW incinerators. Antonio Zerbisias, *Toronto Trashes Montreal in Recycling*, TORONTO STAR, Sept. 12, 1991, at A21.

102. In 1993, the EPA announced an 18-month *de facto* moratorium on the construction of new hazardous waste incinerators. Tom Kenworthy, *Incinerators May Face Tougher EPA Standards; Hazardous Waste Burning is Targeted*, WASH. POST, May 19, 1993, at A3. The moratorium is part of the EPA's "reevaluation of the role of incineration in controlling hazardous waste." *Id.*

In sharp contrast to Representative Richardson's approach, the EPA's proposal would require no waste management planning. Although the proposed NSPS encourages the development of waste management plans, it does not require them.<sup>103</sup> As explained in the proposed rule, "a materials *management* plan is not part of the proposed siting requirements. The proposed siting requirements include the development of only a materials *separation* plan."<sup>104</sup> Accordingly, the EPA's proposal would require no inquiry into whether, in light of other waste management methods, a new incinerator is even needed. Furthermore, there would be no requirement that local, state, or federal governments engage in waste management planning. Rather, the proposed NSPS would require only that the materials separation plan be held open for public review or comment.<sup>105</sup> As such, the EPA's approach would submit complex waste management planning issues to the most local level imaginable—members of the public who happen to attend the public meetings at which the materials separation plans are reviewed. It is not difficult to imagine the incohesive, myriad solid waste management plans that could develop from such a patchwork scheme.<sup>106</sup>

Finally, Representative Richardson's approach is superior to that of the EPA because it would be more ambitious. Representative Richardson's model would establish specific, aggressive goals for diverting MSW to management methods other than incineration.<sup>107</sup> The EPA's proposed NSPS, on the other hand, would set no specific requirements. Moreover, the proposed rule would allow diversion goals to be determined in large part by incinerator owners and operators seeking permits. Although the public and the EPA would play a role in developing materials separation plans, permit applicants would guide the entire process. Because incinerator operators and owners benefit from

---

103. 1994 Proposed NSPS, *supra* note 3, at 48,221.

104. *Id.* (emphasis added).

105. *Id.* at 48,221-22.

106. The EPA's role in managing MSW has been criticized for creating "disparate approaches to the regulation of solid waste nationally." Scofield, *supra* note 48, at 188. The EPA's current proposal would certainly result in even greater disparity in the way solid waste is managed from one community to another.

107. See *supra* notes 73-74 and accompanying text.

high volumes of combustible MSW, it is difficult to imagine such persons advocating aggressive materials separation goals.<sup>108</sup>

For the above reasons, Representative Richardson's model presents a more effective means of significantly improving our Nation's current solid waste management policy. Accordingly, it is the author's opinion that Congress should enact into legislation the approach provided by the Richardson bill.

### CONCLUSION

The effectiveness of any waste management method can be judged according to three criteria: (1) its environmental cost; (2) its economic cost; and (3) its ability to reduce waste. As this note has demonstrated, MSW incineration, when compared to recycling, fails all three criteria. Accordingly, it is no surprise that the EPA ranks recycling as the preferable means of managing MSW. Because current federal waste management policy fails to prefer recycling over incineration, such policy should be revised. In the past, efforts to revise federal policy have been unsuccessful. Most notably, the House Energy and Commerce Committee's defeat of the Kostmayer bill and the EPA's failure to promulgate its proposed 1989 materials separation requirement have frustrated efforts to improve our Nation's waste management policy. The EPA's latest effort, currently pending as a proposed rule, would offer modest improvement of current federal policy. The Richardson bill's approach, on the other hand, would significantly improve federal policy by establishing a clear preference for recycling over incineration. Accordingly, the

---

108. See Orange, *supra* note 25, at 43. Allowing an incinerator operator to guide the development of a materials separation plan may lead to a seemingly ambitious plan which is in fact a "ruse" to quiet incinerator opponents. *Id.* Specifically, incinerator operators may appear to be conceding to seemingly high diversion goals when in fact they may be merely benefitting themselves by agreeing to separate materials that do not burn efficiently. *Id.* Because incinerators require MSW with high BTU values (such as paper, plastic, and wood), incinerator operators may try to avoid truly ambitious goals that would require the diversion of these materials to recycling. *Id.*

Richardson bill should be re-introduced to the 104th Congress, and the provisions evaluated in this note should be enacted into legislation.<sup>109</sup>

*Thomas F. Irwin*

---

109. Except for those provisions of the bill which would fail to classify MSW incinerator ash as a hazardous waste, the author recommends enactment of the entire Richardson bill because, in addition to encouraging waste reduction, it would make both MSW and hazardous waste incineration considerably safer for human health and the environment and would provide greater public participation in the siting of MSW and hazardous waste incinerators.

