

Recycling and Resource Recovery: State and Municipal Legal Impediments

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Reclamation, commonly understood to mean both recycling and resource recovery**, is detrimentally affected by a variety of state and municipal laws. This paper identifies several of those laws, describes their effects on reclamation, and suggests ways of reforming them.

I. THE SOLID WASTE PROBLEM

The volume of solid waste is growing. The United States is annually discarding solid waste at a rate that is increasing five times faster than its population.¹ At the same time, much of the country is running out of sanitary disposal sites. Almost half of our cities in 1973 were expected to exhaust their then current disposal capacity within five years.² Each year, this country must add 500 new

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** Reclamation is a generic term for both recycling and resource recovery. See COUNCIL OF STATE GOVERNMENTS, SUGGESTED STATE LEGISLATION FOR 1973, at 65 (1972). Recycling, however, is different from resource recovery. For the purposes of this paper, recycling means the process by which discarded materials are made reuseable or transformed into new products. A glass bottle, for example, has been recycled when either cleansed and refilled or crushed and used as road paving material.

Resource recovery, on the other hand, is defined in this paper as the process of extracting energy resources from discarded material. An example of resource recovery is the burning of solid waste to create heat and ultimately electricity.

In this paper, "solid waste" shall mean discarded materials with insufficient liquid content to be free flowing. The terms "secondary materials" and "recycled materials" will be used synonymously. And the term "primary materials" will refer to virgin materials, those made from natural resources.

1. NATIONAL LEAGUE OF CITIES & UNITED STATES CONFERENCE OF MAYORS, CITIES AND THE NATION'S DISPOSAL CRISIS 1 (1973) [hereinafter cited as NATIONAL LEAGUE OF CITIES]. In 1973 daily per capita municipal waste generation (which does not include industrial, commercial, mining or agricultural wastes) was approximately 5.5 pounds. L. KIRKLAND, MUNICIPAL RECYCLING—A CONCEPT COME OF AGE 18 (1973) [hereinafter cited as L. KIRKLAND]. Given its growth rate, it should be 8 pounds today. *Id.*

2. NATIONAL LEAGUE OF CITIES, *supra* note 1, at 1.

landfill areas.³ And of the existing landfills, nearly two-thirds fail to meet either federal or state pollution standards.⁴

The country's continuing reliance on virgin materials unnecessarily consumes energy and pollutes the environment. If secondary materials were used by industry as raw material sources, there would be an energy savings of 95% in the production of some products.⁵ Also, the air pollution associated with the manufacturing of certain products would be reduced by as much as 86%, and water pollution by 76%.⁶

By discarding rather than reprocessing our waste, the country depletes its virgin resource supply and correspondingly becomes

3. [1978] 9 ENVIR. REP. (BNA) 1059.

4. OFFICE OF TAX ANALYSIS, U.S. TREASURY DEP'T, FEDERAL TAX POLICY AND RECYCLING OF SOLID WASTE MATERIALS 79 (1979) [hereinafter cited as OFFICE OF TAX ANALYSIS]. See [1979] 9 ENVIR. REP. (BNA) 2303 (one half of the nation's landfills leak contaminants into the ground water).

5. 122 CONG. REC. 22206-05 (1976) (statement by Senator Gravel) [hereinafter cited as CONG. REC.]. The Senator's statement was based on a report prepared for Congress by the Environmental Protection Agency. The report stated that the industrial use of recycled materials would reduce the energy consumed in aluminum smelting by 95%, in paper manufacturing by 66%, in steel manufacturing by 55%, and in copper smelting by 65%. It is unclear whether the cited figures represent a net energy savings for society or simply for the industries involved. Presumably, the figures represent the energy savings for industry because of what would seem to be the impossible task of calculating the amount of energy expended by everyone involved in recycling. For example, a net energy figure for society would require a calculation of the energy consumed by each household in transporting its waste to a recycling center. The data for such a computation is probably non-existent. Without that data, it is impossible to determine whether there is a net energy savings for society. But if calculable, a net energy figure for society would probably be positive, given the magnitude of the net savings for industry.

The operation of a resource recovery system is also reported to have a positive net energy balance. See COR-MET, METROPOLITAN SERVICE DISTRICT SOLID WASTE MILLING—TRANSFER STATIONS, ENVIRONMENTAL ASSESSMENT (1974); P. LOVE, NET ENERGY SAVINGS WASTE MANAGEMENT OPTIONS (Sept. 1976). Twenty units of energy is recovered for each unit of energy expended in operating a resource recovery system. DEP'T OF ECOLOGY, STATE OF WASHINGTON, MARKET ANALYSIS OF RECOVERED MATERIALS AND ENERGY FROM SOLID WASTE 6-3 (1977) [hereinafter cited as DEP'T OF ECOLOGY].

The resource recovery system in Akron, Ohio, which generates electricity by incinerating solid waste, has reduced the energy costs of Akron's inhabitants by 20% and yearly produces the energy equivalent of 500,000 barrels of oil. [1979] 10 ENVIR. REP. (BNA) 1661. As a result, Akron's landfill needs have dropped by 70%. *Id.*

6. CONG. REC., *supra* note 5, at 22206. The Environmental Protection Agency reported to Congress that industrial use of recycled raw materials in place of virgin ores or pulpwood results in 60 to 86% less air pollution and 44 to 76% less water pollution. *Id.* The variation is due to the differing industrial processes used. As was stated in note 5 *supra*, it is unclear whether these figures represent a net savings for society or only for the industries involved.

more dependent on foreign nations to meet its resource needs. The Bureau of Mines projects that by 1985 the United States, unless it actively begins reclamation, will be dependent on foreign nations for more than 50% of its requirements of nine of the most critical virgin ores and metals.⁷ That list will grow to include thirteen basic ores and metals by the turn of the century, with the United States being self-sufficient in the production of only a few metals.⁸ Should this metal import scenario materialize, the deficit side of our balance of payments will expand over the next ten years by \$30 billion.⁹

These problems of waste disposal, pollution and dwindling virgin resources could be ameliorated by reclamation. Yet over the past decade our national rate of recycling has steadily declined,¹⁰ so that the country recycles proportionately less of its paper waste today than it did thirty years ago.¹¹ We convert less than 2% of our waste into useable products and energy, unlike several countries in Western Europe which convert 60% of their waste.¹² Instead, we spend \$5.5 billion annually to bury waste¹³ which, if recycled, would be worth \$5 billion¹⁴ or, if converted to energy, would be equal to 400,000 barrels of oil per day.¹⁵

7. *Id.* at 22205.

8. *Id.*

9. *Id.*

10. *Id.* at 22204.

11. 121 CONG. REC. 2646 (1975) (statement of Congressman Burke).

12. [1979] 10 ENVIR. REP. (BNA) 1661 (statement of Barbara Blum, EPA Deputy Administrator; Denmark and Switzerland convert 60% of their waste into useful materials or energy).

13. [1979] 9 ENVIR. REP. (BNA) 2303.

14. *Solid Waste: Disposal and Reuse Present Major Problems*, 31 CONG. Q. WEEKLY REP. 1019, 1020 (1973). The cited figure represents the gross value of buried recyclable material. But several communities that recover and sell the recyclable material in their waste have reported significant net savings in the operation of their collection and disposal systems. Benton County, Tennessee, by recovering the recyclable products in its waste has reduced its waste disposal costs by half. 124 CONG. REC. S5433 (daily ed. Apr. 12, 1978) (statement of Senator Hathaway). In Marblehead, Massachusetts, the sale of recovered goods has consistently produced a net savings of \$3,000 per month in disposal operations. ENVIRONMENTAL PROTECTION AGENCY, FOURTH REPORT TO CONGRESS ON RESOURCE RECOVERY AND WASTE REDUCTION 35 (1977) [hereinafter cited as RESOURCE RECOVERY].

15. [1979] 10 ENVIR. REP. (BNA) 1661. The figure does not represent the net energy potential of our waste. Regarding the amount of energy consumed by a resource recovery system, *see* note 5 *supra*. As to the cost of recovering the energy contained in our waste, a study performed for Portland, Oregon, concluded that it might be lower than the average cost of sanitary landfilling. DEP'T OF ECOLOGY, *supra* note 5,

Our failure to reclaim more energy and products from our waste is fundamentally the result of our modified free market system. American industries needing raw materials will use secondary materials only when their purchase price is competitive with the price of virgin materials. Because of a national heritage of abundant natural resources, virgin materials have been inexpensive relative to secondary materials.¹⁶ This, by operation of the free market system, has had the dual effect, on the one hand, of encouraging extensive use of virgin materials and energy and, on the other, of discouraging competition from secondary materials.¹⁷

These natural and market forces have been aggravated, however, by certain local laws, public policies, and the market pricing system. These laws, policies, and practices have made the use of virgin materials and fuels economically and psychologically more attractive than their reclaimed counterparts. The effects of these specific discriminatory measures and the suggestions as to how to reform them are considered below.

II. DISCRIMINATORY COST-PRICING

A. *Social Costs: Internalization vs. Externalization*

Many of the costs of using a product are not included in its price. Absent legislative intervention, none of the following costs are reflected in a product's price: the costs of remedying the air and water pollution created by the production of the product; the costs of unnecessarily having used primary rather than secondary materials in the production process; and the costs of collecting and safely disposing of the product after it is discarded. These costs and others not included in a product's price are commonly called "social costs."

The social costs are partially paid for either through waste disposal fees or indirectly and collectively through general real estate taxes.¹⁸ Individual producers are seldom charged for the later disposal of their products or the pollution generated by their creation and use.

at 5-2. In a similar study for Seattle, Washington, it was estimated that if the city burned its garbage to produce power, it could annually produce 1.5 million tons of steam and 502 million kilowatt hours of electricity, while disposing of its waste at one-half the cost of landfilling. *Seattle Post-Intelligencer*, May 3, 1980, at A2, col. 1.

16. RESOURCE RECOVERY, *supra* note 14.

17. *Id.*

18. *Id.* at 89.

The failure of the product price to reflect the social costs is both inequitable and inefficient.¹⁹ It is inequitable to require the taxpayer who may not have used the product to pay for its disposal, while the manufacturer and the actual user enjoy the benefits of the disposal and a clean environment. It is inefficient in that when the full costs of using a product are not reflected in its price, consumers and producers lack a direct monetary incentive to minimize those costs. Instead, consumers perceive the cost of using products to be lower than it actually is. This encourages them to purchase more goods and not to recycle. Under full-cost pricing, consumers might shift their purchasing more toward low-waste items, such as returnable commodities and longer-lived durable goods, and would be more likely to recycle purchased items. Producers, in turn, might use more secondary materials in production or redesign products to reduce material requirements or to improve recyclability. Thus, the failure of consumer product markets to reflect all waste management costs amounts to an implicit subsidy for physically and economically wasteful production and consumption habits.

Because of this cost-pricing deficiency, several state and municipal laws impair reclamation. As discussed below, the pricing system causes the ubiquitous legal requirement of "competitive bidding" to reduce both the supply of and demand for reclamation services.

B. *Cost-pricing and Competitive Bidding Laws*

1. *Competitive Bidding and Governmental Procurement of Reclamation Services*

Most states require their communities, when contracting for the collection and disposal of waste, to award the contract to the lowest bidder.²⁰ Because land is still relatively inexpensive and the social

19. *Id.*; L. KIRKLAND, *supra* note 1, at 60-61.

20. *E.g.*, WASH. REV. CODE § 35.23.353 (1979) ("The contract shall be awarded to the lowest responsible bidder."); OHIO REV. CODE ANN. §§ 307.86, 735.05 (Baldwin Supp. 1979) ("contract with the lowest and best bidder"). Only 30% of residential wastes are collected by public utilities. ANNUAL SURVEY OF UNITED STATES COLLECTION PRACTICES, WASTE AGE 6 (1977). The remainder is collected by public or private contract.

An additional barrier to reclamation contracts is the length of time for which a disposal contract can be granted. Many laws limit the period to one year. *See, e.g.*, ANN ARBOR, MICH. CODE § 26.2.5(1) (1957); INGLEWOOD, CAL. CODE § 5220 (1966). A very short contract period does not allow the operator of a resource recovery facility to recoup its investment. Since a resource recovery facility may cost \$75 million to

costs of burying our waste are not reflected in the price of landfill disposal, the lowest bid invariably involves landfilling.²¹ When a landfill proposal is accepted, the social costs of wasted land, natural resources, and energy are borne by the public. If the landfill proposal included these costs, a reclamation bid might be the low-cost proposal.

The effect of not awarding the community disposal contract to a reclamation enterprise is that very little residential waste is recycled.²² Several factors prompt people to use the government sponsored waste services rather than to recycle voluntarily.²³ First, for reasons discussed later, recycling centers are usually located at relatively far distances from residential areas.²⁴ This makes recycling more costly and inconvenient than the government provided door-step service. Additionally, the household has the burden of storing its waste until it can be transported to a recycling center, while at the same time being charged a monthly rate for city disposal services no longer used.²⁵ Studies suggest that no appreciable increase in recycling will occur until the government provides reclamation services or voluntary recycling is made more convenient and inexpensive.²⁶

To encourage recycling by individuals, the fixed collection fees should be altered to reflect actual use of the city collection service. In an attempt to encourage the use of recycling, Seattle, Washington, reduced the fees assessed households in certain areas which

construct, *see* CONG. REC., *supra* note 5, at 22205, a contract length of 15 to 20 years is necessary. PROSECUTING ATTORNEY, SNOHOMISH COUNTY, WASH., LEGAL ISSUES RELATING TO RESOURCE RECOVERY IN SNOHOMISH COUNTY, WASHINGTON 132 (1978). At least one state has remedied the problem by allowing contracts for unlimited durations. DEL. CODE ANN. tit. 7, § 6420(e) (Supp. 1978).

21. SPOKANE COUNTY, WASH., COORDINATED COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN FOR SPOKANE COUNTY 9-11 (1971) [hereinafter cited as SPOKANE COUNTY].

22. Less than 15% of all recycled material is derived from residential solid waste. *See* DEP'T OF ECOLOGY, *supra* note 5, at 5-9.

23. *See* SEATTLE RECYCLING, FINAL REPORT FOR THE SORT PROJECT, app. 6 (Aug., 1979) (report by private contractor on Seattle's program to recycle a portion of its collected waste; on file at University of Wash. School of Law) [hereinafter cited as SEATTLE RECYCLING]; Hecox, *Urban Solid Waste Streams—Can Voluntary Recycling Solutions Work?*, 2 ENV'T'L AFF. 614 (1972) [hereinafter cited as Hecox].

24. *See* text accompanying notes 105-16 *infra*.

25. *See* SCS ENGINEERS, SEATTLE SOLID WASTE PILOT PROGRAMS, SOURCE SEPARATIONS, AND VARIABLE RATE (Jan., 1980) (on file at University of Wash. School of Law) [hereinafter cited as SCS ENGINEERS].

26. SEATTLE RECYCLING, *supra* note 23, at app. 6; Hecox, *supra* note 23.

did recycle.²⁷ A study of the Seattle plan revealed that varying disposal rates would influence recycling, but concluded that the Seattle fees did not vary enough to eliminate the disincentive to recycle.²⁸

As to increasing reclamation among city collection contractors, the competitive bidding impediment could be remedied in three ways. One approach involves enforcing the existing statutes that define the contours of the competitive bidding laws. Most states require counties and municipalities to act in the best public interest.²⁹ Since the federal and many state governments recently have declared reclamation to be in the public's best interest,³⁰ a community, applying the competitive bidding law in the public interest, should have to consider the disposal alternative of reclamation. A community should not be able to award a landfilling contract until the social costs have been evaluated.

A second approach, also involving the reconciliation of several laws, is available in a few states. In Washington, for instance, municipalities and counties have legal authority to operate recycling and resource recovery facilities.³¹ Although they still are bound to award all contracts for solid waste processing to the "lowest responsible bidder,"³² the authority to operate reclamation facilities implies that there would be no malfeasance if the community re-

27. SCS ENGINEERS, *supra* note 25, at 51.

28. Instead of being assessed a fixed monthly fee, certain "test area" households were charged according to the number of garbage containers they used. A household that used one can was charged \$1 monthly, whereas the user of two to four cans was assessed \$5.60. *Id.* Even though the variable rate caused only a six percent reduction in container usage, two studies of the project concluded that increasing the rate differential would induce more recycling. *Id.*; SEATTLE RECYCLING, *supra* note 23, at 19.

29. C. RHYNE, MUNICIPAL LAW 343, 377 (1957).

30. *E.g.*, Solid Waste Disposal Act, 42 U.S.C. § 691 (1976 & Supp. 1978); Solid Waste Authority Act, DEL. CODE ANN. tit. 7, § 6401 (Supp. 1978); Solid Waste Recycling Authority Act, WIS. STAT. § 499.03 (Supp. 1979); *see also* Wisconsin Solid Waste Recycling Authority v. Earl, 70 Wis. 2d 464, 494, 235 N.W.2d 648, 665 (1975) (creating a state agency to further recycling is "pursuant to a legitimate public purpose of preserving the health, safety and welfare of the people").

There is no evidence that anyone has ever challenged a landfill contract on the basis that it is contrary to the public interest. Presumably, a lawsuit could be brought by the residents of any community, alleging that the municipal corporation abused its discretion by not considering the recycling alternative.

31. WASH. REV. CODE § 35.21.152 (Supp. 1980); *see* OHIO REV. CODE ANN. § 6123.02 (Baldwin 1980).

32. WASH. REV. CODE § 35.23.353 (1965); *see* OHIO REV. CODE ANN. § 307.86 (Baldwin 1980).

fused to let a contract to a lowest bidder who uses a landfill. The cogency of that conclusion is increased by the presence of another statute, often found as a companion to the above law, that requires communities to use recycling and resource recovery to the maximum extent possible.³³ In fact, these two laws, where they occur, suggest that full consideration of the costs of landfilling is a condition precedent to awarding any landfill contract.³⁴

A third solution, proffered by the Council of State Governments, necessitates the passage of a law that requires the contract's effect on reclamation to be considered before any disposal contract is awarded.³⁵ The law envisions an investigation into the environmental and energy costs of any disposal contract. The primary virtues of this proposal are that the deficiencies of the present pricing system would be exposed and a decision could be made which would maximize resource allocation. Moreover, the method used, the cost/benefit/effect analysis, is one with which governmental agencies are familiar.

2. Competitive Bidding and Governmental Procurement of Recycled Goods

The competitive bidding requirement applies to governments not only when they contract for waste disposal services, but also when they purchase goods.³⁶ Since virgin resources are cheaper

33. E.g., WASH. REV. CODE § 70.95.020 (Supp. 1980).

34. There is no evidence that this suggestion has been accepted anywhere.

35. COUNCIL OF STATE GOVERNMENTS, SUGGESTED STATE LEGISLATION FOR 1973, at 75 (1972) (an environmental impact statement is required for all "actions which significantly affect this state's ability to recover and recycle resources from solid waste") [hereinafter cited as COUNCIL OF STATE GOVERNMENTS]. Most states require an environmental assessment of any project "significantly affecting the quality of the environment." See, e.g., WASH. REV. CODE § 43.21C.030(e) (Supp. 1980). The Council's suggestion would insure that a disposal contract would receive the same evaluation.

For a discussion of the problems with cost/benefit analyses, see Wildavsky, *The Political Economy of Efficiency: Cost-Benefit Analysis, Systems Analysis, and Program Budgeting*, in *POLITICAL SCIENCE AND PUBLIC POLICY* 55, 57-64 (A. Ranney ed. 1968). The primary problem with cost/benefit analysis is the assumption that all effects can be quantified and categorized as either costs or benefits. In the context of requiring a small community to conduct such an analysis before granting a disposal contract, there may be a point where the cost of preparing such an evaluation exceeds the benefit it confers.

36. E.g., WASH. REV. CODE § 35.23.353 (1965); MO. ANN. STAT. § 34.040 (Vernon 1969); see also RESEARCH DEP'T, ARK. LEGISLATIVE COUNCIL, RECYCLING WASTE PAPER app. A (1974) (surveys state procurement laws) [hereinafter cited as RESEARCH DEP'T].

than recycled materials under the market pricing system, partially because the social costs of using virgin materials are not included, the competitive bidding law has the effect of requiring governmental agencies to buy goods of virgin rather than recycled content.

Recognizing the disadvantage suffered by secondary materials, several states and municipalities have, either by statute or regulation, authorized their agencies to purchase recycled paper.³⁷ Most of these enactments, however, fail to remedy the procurement preference for primary goods. First, simply authorizing the agencies to buy recycled paper does not alter its price competitiveness. As long as the competitive bidding law remains, the agencies must purchase virgin products.³⁸ In states where both laws exist, the agencies continue to purchase paper of virgin fibers.³⁹

A second problem with the "remedial" laws is their definition of "recycled products." Recycling will not be stimulated when its definition is so broad as to allow industrial/production scrap, the material discarded at the factory, to constitute the recycled fiber rather than post-consumer waste. The former, because it is easily collectable and homogenous, is very price competitive and generally recycled.⁴⁰ Post-consumer paper waste, however, lacks those attributes and thus comprises only 20% of all the paper recycled.⁴¹ The original General Services Administration standards ordering federal agencies to buy recycled paper were flawed in this regard, defining recycled fibers so broadly that the paper mills were able to meet the standards by continuing to recycle their home scrap, their woodwaste, rather than use post-consumer waste.⁴²

Oregon and New York City have attempted to overcome the obstacles to the procurement of recycled materials. Oregon, exemplifying a moderate approach, allows its agencies to purchase recycled

37. In a 1974 survey, 12 of the 41 responding states indicated that they had either statutory or administrative provisions for purchasing recycled paper products. RESEARCH DEP'T, *supra* note 36, at 9-10.

38. California and Missouri, for example, statutorily encourage their agencies to purchase recycled paper. But the agencies are not permitted to buy recycled paper if its price exceeds the cost of virgin paper. CAL. GOV'T CODE § 14784.3 (West 1980); MO. ANN. STAT. § 34.032 (Vernon Supp. 1981).

39. WIS. LEGISLATIVE COUNCIL STAFF, STATE'S POLICIES AND PROGRAMS ON RECYCLED PAPER 2 (1976).

40. L. KIRKLAND, *supra* note 1, at 37-39; see DEP'T OF ECOLOGY, *supra* note 5, at 5-18 to 5-21.

41. L. KIRKLAND, *supra* note 1, at 37-39.

42. LEAGUE OF WOMEN VOTERS, RECYCLE 30 (1972) [hereinafter cited as RECYCLE].

materials even though their prices exceed the lowest bid submitted, provided the recycled good's price does not exceed the lowest bid by more than 5%.⁴³ The Oregon statute also defines recycled paper to be paper composed of not less than 50% secondary waste materials or 25% post-consumer waste.⁴⁴ New York City, by ordinance, requires its agencies to purchase products with recycled components.⁴⁵ Moreover, the paper purchased must have a minimum of 20% post-consumer recycled fiber.⁴⁶ Because the New York City ordinance requires the purchase of recycled products made from post-consumer waste, it should be more effective than the Oregon statute in remedying the disadvantage suffered by recycled goods under the present pricing system.

C. *Remedy: Product Disposal Tax*

One solution, more encompassing than those already identified, is the product disposal tax. Such a tax would be similar to an excise tax.⁴⁷ It would be exacted from either the manufacturer or the retailer, equal to the products' prospective waste collection and disposal costs.⁴⁸ This tax would insure that those whose production

43. OR. REV. STAT. § 279.739(2)(a) (1979).

44. OR. REV. STAT. § 279.731(2) (1979).

45. ENVIRONMENTAL PROTECTION ADMINISTRATION, CITY OF NEW YORK, MEMORANDUM RE: PREFERENTIAL PURCHASE OF ENVIRONMENTALLY BENEFICIAL PRODUCTS 284 (1971).

46. *Id.*

47. An excise tax is "[a] tax imposed on the performance of an act, the engaging in an occupation, or the enjoyment of a privilege." BLACKS LAW DICTIONARY 506 (5th ed. 1979).

48. The legal problems that can arise with implementing a product disposal tax scheme are identified in *Soc'y of Plastics Indus., Inc. v. City of New York*, 68 Misc.2d 366, 326 N.Y.S.2d 788 (1971). Involved in that case was a New York City ordinance which provided for a tax of two cents to be paid by the retailer or its wholesaler on the sale of every "rigid or semi-rigid" plastic container. It further provided for an allowance of one cent for each taxable container manufactured from recycled materials. This scheme, on several grounds, was held invalid.

In so ruling, the court indicated that a properly drafted disposal tax would be constitutional. It began by stating that if a municipality intends to implement a disposal tax, there must be specific legal authority delegating such power to the municipality. A municipal corporation does not possess inherent power to assess and levy taxes. Further, the court pointed out that the municipality must take the categories of taxes identified in the enabling legislation as a package, not exempting items or activities to be taxed which are not exempted by the terms of the enabling legislation.

New York State had enacted legislation enabling its cities to tax "the sale of containers made in whole or in part of rigid or semi-rigid paper board, fibre, glass, metal, plastic or any combination of such materials . . ." But since the city ordinance applied to only plastic containers, the court concluded that it was a different

and consumption decisions determine the quantity of solid waste not only will be consciously aware of but must directly bear the environmental costs resulting from their choices. By so internalizing the social costs on a product by product basis, economic incentives would arise to stimulate economically efficient waste reduction and recycling efforts by both consumers and producers. Such a framework of incentives would please both the environmentalist and the economist, and relieve the energy and environmentally conscious consumer from having to make ad hoc guesses as to the full costs of using any non-reuseable good.⁴⁹

A few states in attempting to control littering are utilizing the disposal charge concept.⁵⁰ In those schemes, a fee to cover the cost of collecting and disposing of litter is assessed from the manufacturer and/or retailer doing business in the state. The amount of the fee may be based on either the quantity or value of sales,⁵¹ the na-

tax than the one authorized by the legislature. Hence, New York City had exceeded its authority.

The ordinance was also found unconstitutional as violate of the equal protection clause since it only taxed plastic containers. The court found that classification to be arbitrary, bearing no reasonable relation to the objective of the legislation. The objective of the ordinance was to promote the recycling of containers and to reduce the cost of solid waste disposal. But the evidence showed that the ordinance would cause an increased use of paper, metal, and glass containers which under the city's disposal practices were more costly to dispose of and no more recyclable than plastic containers.

Because the ordinance was arbitrary and economically detrimental to the plastics business, it was also held violative of due process. The fact that it was revenue producing was not sufficient to save it from a conclusion of arbitrariness. The court stressed that revenue production was not its purpose.

The terms "rigid or semi-rigid" were also held to be vague, constituting another ground for holding the ordinance violative of due process. But the court did state that such an ordinance would not impose an undue burden on interstate commerce in violation of the commerce clause.

For a thorough discussion of the product disposal tax concept, see RESOURCE RECOVERY, *supra* note 14, at 89.

49. RESOURCE RECOVERY, *supra* note 14, at 90.

50. *E.g.*, Model Litter Control Act, WASH. REV. CODE ANN. § 70.93.130 (Supp. 1981); Litter Control, Recycling, and Resource Recovery Assessment, CAL. REV. & TAX. CODE §§ 42000-42703 (West 1979); Litter Control Act, CONN. GEN. STAT. ANN. §§ 22a-77 to 22a-59 (West Supp. 1980). The laws have been effective in reducing the amount of litter along the highways. See C. STERN, IMPACTS OF BEVERAGE CONTAINER LEGISLATION ON CONNECTICUT AND A REVIEW OF THE EXPERIENCE IN OREGON, VERMONT AND WASHINGTON STATE (1975).

51. See WASH. REV. CODE ANN. § 70.93.120 (1979) (a fee of one and one-half hundredths of one percent of the gross sales of a Washington business, which applies only to wholesalers and retailers; for manufacturers, the fee is that percentage of the value of products manufactured and sold).

ture of the product or the number of employees.⁵²

Although they use the disposal charge mechanism, the Litter Acts only partially remedy the deficiency of the current pricing system. They merely internalize the costs of collecting and disposing of waste. The assessed fees do not reflect all the social costs of using non-reuseable products, such as the costs of consuming large quantities of energy and natural resources when virgin rather than recycled goods are used. The excluded costs are those which make virgin products economically preferable to recycled goods when not reflected in the prices. By not incorporating these costs into the fee, the Litter Acts only minimally promote reclamation.

The failure of the Litter Acts to internalize costs fully could be remedied by a suggestion from the Environmental Protection Agency that any item capable of being recycled or containing recycled material be exempted from the schemes or taxed at reduced rates.⁵³ The costs of non-reclamation then would be reflected in the price of any commodity not capable of being recycled or lacking recycled content.

The product disposal tax suggested by the Environmental Protection Agency would be assessed only on paper products and nonpaper packaging materials, since these categories comprise about 80% of the total non-food product materials in the municipal waste stream.⁵⁴ The charge would be based on the weight of the product, since that criterion would be easy to apply and for most products would appropriately reflect the cost of their disposal.⁵⁵ The charge would equal the cost of disposing of a ton of waste, currently \$26 per ton.⁵⁶ To regulate the use of light materials, such as nonrecyclable plastic, the scheme would offer reduced rates on goods capable of being recycled or which contain recycled materials.⁵⁷ The Agency concluded that this scheme, by making the use of virgin resources bear its full social costs, would mitigate the disadvantage suffered by recycled products under the present cost-pricing system.⁵⁸

52. See CONN. GEN. STAT. ANN. § 22a-84 (West Supp. 1980).

53. RESOURCE RECOVERY, *supra* note 14, at 89.

54. *Id.* at 90.

55. *Id.* at 91.

56. *Id.* at 92.

57. *Id.* at 89.

58. *Id.* at 94-95. The EPA estimated that under its proposed scheme the amount of recycling in glass, steel, and aluminum packaging would double the amount recycled in 1970. *Id.* And paper recycling would increase from 8.5 to 10 million tons per year. *Id.*

III. DISCRIMINATORY TAX POLICIES

Several state tax laws, by reducing the tax burden on virgin resource industries, encourage the utilization of primary instead of secondary materials. One allows timber growers to apply a reduced tax rate to their income from the sale of timber, to report their expenses prior to the realization of the income, and to deduct their expenses from ordinary income.⁵⁹ Another statute permits the mining industries to realize a flat percentage of their income and to deduct exploration and development costs from ordinary income rather than from capital gains.⁶⁰ These tax provisions, by lowering the price of virgin materials, weaken incentives for reclamation.

The actual impact of these state tax laws on reclamation is unknown. But according to one report the corresponding federal tax laws, after which most of the state provisions are patterned, give the virgin resource industries the equivalent of a cash grant ranging from 8 to 12% of the value of the output of coal, copper and iron ore mining and from 35 to 45% of the value of standing timber.⁶¹ In 1975, these federal tax provisions subsidized the timber

59. *E.g.*, CAL. REV. & TAX. CODE §§ 17711, 18181, 18182 (West Supp. 1980).

60. *E.g.*, UTAH CODE ANN. § 59-14-4(h) (1974); CAL. REV. & TAX. CODE §§ 17690, 17689.5 (West Supp. 1980).

61. OFFICE OF TAX ANALYSIS, *supra* note 4, at ii. The corresponding federal tax provisions are I.R.C. §§ 613, 631(a), 631(b). Notwithstanding the magnitude of the federal tax subsidies, there is no consensus as to whether recycling is harmed by them. Compare MIDWEST RESEARCH INSTITUTE, PAPER RECYCLING, THE ART OF THE POSSIBLE 1970-1985 (1973) (a study conducted for the American Paper Institute, concluding that the federal tax policies substantially impair recycling) with OFFICE OF TAX ANALYSIS, *supra* note 4. The Treasury Department concluded that elimination of the federal tax subsidies would increase recycling by only one to five percent. *Id.* at 49. Its research indicated that primary and secondary materials are alternative sources of inputs for production, with low substitutability; that the subsidized virgin materials comprise only a fractional part of a finished product, and hence the removal of the subsidy would only marginally add to the cost of the final product; that world demand and supply determine the prices of raw materials, and the removal of the subsidy would not substantially affect world prices; and finally, that the supply of recyclables only minimally reacts to the price fluctuations of virgin materials. *Id.* at i-ii. On the basis of these findings, the Department recommended that the federal tax subsidies not be eliminated and that reciprocal tax incentives for recycled materials not be provided.

The Treasury Department study is, however, susceptible to criticism. It did not consider how removal of the federal tax subsidies would affect recycling if some or all of the other identified legal barriers to reclamation were also removed. For example, the effect of removing both state and federal tax subsidies was not considered, nor how elimination of freight rate disparities, *see* text accompanying notes 88-104 *infra*, in combination with removal of these tax provisions would alter demand for secondary goods. Furthermore, its conclusion that the demand for secondary materi-

industry by \$260 million and mineral extractors by \$3.2 billion.⁶²

A. *Capital Gains Treatment for Timber*

Several states have tax laws that allow the taxpayer who owns or has a contract right to cut standing timber to treat the cutting of that timber as a sale or exchange subject to capital gains treatment.⁶³ No actual sale or exchange of the timber is necessary, and the gain is measured by the difference between the taxpayer's adjusted cost basis and the fair market value of the timber on the first day of the taxable year in which it is cut.⁶⁴ The law is intended to encourage conservation and reforestation, and eliminate tax discrimination between taxpayers who dispose of timber by cutting and those who sell it outright.⁶⁵

The capital gains treatment reduces the cost of standing timber in two ways. First, the tax rate on income characterized as capital gains is lower than that on ordinary income.⁶⁶ The capital gains rate may be 50% lower than that applied to ordinary income. Because of the capital gains treatment, the price of virgin timber is reduced, making it more economically attractive than waste paper as the raw material source for paper production.⁶⁷

The secondary effect of the capital gains treatment is that current operating costs can be deducted from the ordinary income of any of the taxpayer's other enterprises.⁶⁸ For example, a corporation engaged in both timber growing and manufacturing could deduct its timber growing expenses from revenue generated by manufacturing. The revenue resulting from the timber is taxed at the lower capital gains rate while the timber related expenses are deducted

als is price inelastic may be untenable after *Nat'l Ass'n of Recycling v. ICC*, 585 F.2d 522, 535 (D.C. Cir. 1978). In that case, the court rejected a similar conclusion by the Interstate Commerce Commission.

62. STAFF OF THE SUBCOMM. ON PRIORITIES AND ECONOMY IN GOVERNMENT OF THE JOINT ECONOMIC COMM. OF CONGRESS, 93RD CONG., 2D SESS., REPORT ON FEDERAL SUBSIDY PROGRAMS 96 (Comm. Print 1974) [hereinafter cited as FEDERAL SUBSIDY PROGRAM].

63. *E.g.*, CAL. REV. & TAX. CODE §§ 17711, 18181, 18182 (West Supp. 1980).

64. *Id.*

65. *See* JOINT ECONOMIC COMM. OF CONGRESS, 92D CONG., 2D SESS., THE ECONOMICS OF FEDERAL SUBSIDY PROGRAM, A COMPENDIUM OF PAPERS SUBMITTED TO THE JOINT ECONOMIC COMMITTEE, pt. 3 at 337 (Comm. Print 1972).

66. *E.g.*, CAL. REV. & TAX. CODE § 18162.5 (West Supp. 1980).

67. The effect of the federal timber capital gains tax provisions, after which most of the state timber tax schemes are patterned, is to reduce the supply price of timber by 20%. OFFICE OF TAX ANALYSIS, *supra* note 4, at 32.

68. *Id.* at 35.

from the higher taxed ordinary income of other enterprises. The deduction has the effect of converting ordinary income into a capital gain which reduces the timber grower's net tax liability and ultimately the supply price of timber.⁶⁹

B. *Percentage Depletion Allowance and Other Mining Deductions*

A few states allow exclusion of a certain percentage of the gross income derived from mining, oil and gas wells, and sometimes timber.⁷⁰ The percentage of tax-free income depends on the character of the resource. In California, the depletion allowance varies from 22% for oil and gas to 10% for coal.⁷¹ Utah allows a fixed 33½% on all resources.⁷² The purpose of the tax is to stimulate exploration and discovery of natural resources.⁷³ The effect is to lower the tax rate for the mining industry which in turn reduces the cost of virgin materials.

States having the depletion allowance usually have two other tax laws that also reduce the cost of mining virgin resources. One provides that certain development costs are deductible from gross income in the year in which they are expended.⁷⁴ The other allows an immediate deduction for exploration expenses.⁷⁵ These laws exempt exploration and development costs from being characterized as capital expenses. If classified as capital expenses, these costs would have no beneficial tax effect until the mine reached the production stage or was sold. These tax provisions operate as a tax subsidy to the mining industry by reducing the present value of taxable income.⁷⁶ The effect is to reduce tax liability in year one by a certain dollar amount rather than, for example, in year ten when the same amount would have less purchasing power. As a result of these two provisions, the secondary materials industry may have a

69. The effect of the similar federal deduction is to reduce the supply price of timber by 9%. *Id.* at 36.

70. *E.g.*, UTAH CODE ANN. § 59-14-4(h) (1974); ARIZ. REV. STAT. ANN. § 43-1028 (Supp. 1979).

71. CAL. REV. & TAX. CODE §§ 17686, 17687 (West Supp. 1979).

72. UTAH CODE ANN. § 59-14-4(h) (1974).

73. See *Hearings on the Economics of Recycling Waste Materials Before the Subcomm. on Fiscal Policy of the Joint Economic Comm. of Congress*, 92d Cong., 1st Sess. 56 (1971) [hereinafter cited as *Hearings on Recycling*].

74. *E.g.*, CAL. REV. & TAX. CODE §§ 17690, 24836 (West Supp. 1980).

75. *E.g.*, CAL. REV. & TAX. CODE §§ 17689.5, 24837, 24837.5 (West Supp. 1980).

76. The similar federal tax provisions had the effect in 1975 of an \$860 million subsidy to the mining industry. FEDERAL SUBSIDY PROGRAM, *supra* note 62, at 96.

tax rate which when expressed as a percentage of net income is twice that of the virgin material extractor.⁷⁷

C. *Remedy: Reclamation Tax Benefits*

The competitive inequality created by these tax provisions could be eliminated by repealing them or extending equal tax incentives to reclamation industries. Since similar federal tax provisions have been challenged for many years and Congress continues to believe they are worthwhile,⁷⁸ the probability of the states repealing their tax provisions is small. The alternative of granting equal tax benefits to reclamation must therefore be considered.

There are several tax reducing measures that could be extended to reclamation participants which would equal those now enjoyed by the users of primary materials. One proposed scheme, called a negative sales tax, would allow a manufacturer to take a tax deduction (or a tax credit) for purchasing or selling a recycled good.⁷⁹ The deduction or credit would be computed as a percentage of the cost of the recycled material. The proposal is similar to the percentage depletion allowance for virgin materials and would allow companies to switch from using virgin materials to recycled materials without suffering adverse tax effects.

A second proposal, intended to encourage construction and development of reclamation facilities and technology, advocates a rapid write-off of depreciation allowances. As a general principle, taxpayers are allowed to deduct from their yearly gross income a portion of the cost of their capital goods.⁸⁰ The earlier these deductions can be taken, the cheaper becomes the purchased capital asset, since a dollar not paid in taxes today is worth more than one not paid in a few years. To spur reclamation, it has been suggested that the usual number of years over which depreciation can be taken should be shortened to five, allowing the taxpayer to deduct one-fifth the cost of any reclamation asset for each of five years.⁸¹

77. Such is the effect of similar federal tax provisions. HOUSE COMM. ON WAYS AND MEANS & SENATE COMM. ON FINANCE, 91st CONG., 1st SESS., TAX REFORM STUDIES AND PROPOSALS (Comm. Print 1969).

78. See generally STAFF OF JOINT COMM. ON INT. REV. TAXATION, 81st CONG., 2D SESS., LEGISLATIVE HISTORY OF DEPLETION ALLOWANCES (Comm. Print 1950).

79. COUNCIL OF STATE GOVERNMENTS, *supra* note 35, at 72; *Hearings on Recycling*, *supra* note 73, at 20-40.

80. See OFFICE OF TAX ANALYSIS, *supra* note 4, at 110-12.

81. COUNCIL OF STATE GOVERNMENTS, *supra* note 35, at 73; CITIZENS ADVISORY COMMITTEE ON ENVIRONMENTAL QUALITY, ANNUAL REPORT TO THE PRESIDENT AND TO THE COUNCIL ON ENVIRONMENTAL QUALITY 36 (1972).

For a taxpayer in ferrous metals manufacturing and in the 48% tax bracket, the five-year plan would effectively reduce the price of a capital asset by over 13%.⁸¹

Some states have proposed investment tax credits as an alternative to the rapid write-off scheme.⁸³ A 10% investment credit, for instance, would allow the taxpayer to subtract 10% of the price of capital assets purchased for reclamation from his or her tax payments. This would reduce the cost of the capital asset and yet would not prevent the taxpayer from recovering the entire purchase through tax depreciation deductions.⁸⁴ Assuming a 10% investment tax credit, the cost of an asset purchased by a ferrous metal manufacturer in the 48% tax bracket would be reduced by nearly 17%.⁸⁵ To the extent that the use of recyclable materials is responsive to their cost, an investment tax credit, like a rapid write-off scheme, would increase recycling.

Of these tax proposals, the negative sales tax measure strikes most directly at mercantile indifference to reclamation. The existing recycling facilities have the capacity to process twice their current volume.⁸⁶ This indicates the primary barrier to increased recycling is insufficient demand, not supply.⁸⁷ The negative sales tax measure directly affects the demand for recycled materials by rewarding those who purchase them. For that reason, it would stimulate recycling more than the other measures. The rapid write-off and investment credit proposals, by contrast, are oriented to increasing supply by making investment in reclamation assets less costly. They affect the demand for recycled products only indirectly by reducing the cost of processing recycled products. This is not to say the rapid write-off and tax investment credit schemes would not promote reclamation, but only that they would to a lesser degree than the negative sales tax.

IV. DISCRIMINATORY FREIGHT RATES

Intrastate freight rates for recyclable materials often are substantially higher than those for equal quantities of directly competing virgin resources. In Minnesota, for example, a shipper pays \$0.51

82. OFFICE OF TAX ANALYSIS, *supra* note 4, at 113.

83. TASK FORCE WORKING GROUP, NEW YORK STATE GOVERNOR'S TASK FORCE ON RESOURCE ISSUES 31 (1977); see OFFICE OF TAX ANALYSIS, *supra* note 4, at 104.

84. OFFICE OF TAX ANALYSIS, *supra* note 4, at 116.

85. *Id.* at 119.

86. DEP'T OF ECOLOGY, *supra* note 5, at 4-5.

87. See RECYCLE, *supra* note 42, at 9.

per cwt to transport paper scrap by rail, but only \$0.365 per cwt to transport pulpwood.⁸⁸ The effect of such dissimilar freight rates is to raise the cost of recyclable materials relative to virgin resources⁸⁹ and thus, as congressionally acknowledged, to reduce the demand for recycled goods.⁹⁰

The once substantial reasons for the rate disparity no longer apply. Before the advent of containerization in shipping processes, transporting scrap was difficult and expensive.⁹¹ Jagged edges on scrap metals injured box cars and other cargo. Movement of scrap was burdensome because the straps holding the baled scrap together often broke, requiring a major clean-up. Additionally, compressing scrap materials was not possible.⁹² A larger shipping volume was required, and so higher rates were justifiable. But times have changed. Containerization techniques have made scrap movement easy and eliminated the risk of harm to other cargo.⁹³ Similarly, technology has overcome the compression problems, reducing the volume required for scrap shipment.⁹⁴

Since the transportation characteristics of scrap materials are no

88. Letter from Donald W. Wickstrom, Assistant Director, Minn. Dep't of Transp., to author (March 17, 1980) (on file at University of Washington School of Law); see TASK FORCE WORKING GROUP, DEP'T OF ENV'T'L CONSERVATION, STATE OF NEW YORK, FIRST PRESENTATION OF ANALYSIS OF RESOURCE RECOVERY ISSUES 51 (1977) (discriminatory intrastate freight rates are common among the states); Munchow, *Recycling of Solid Waste: Legal Impediments and a Program for Reform*, 59 CORNELL L. REV. 440, 475 (1974) ("the pattern of freight rate discrimination against recycled materials found at the national level is reflected at the state level.") [hereinafter cited as Munchow].

89. The costs of transporting some recycled materials, such as low grade textile waste, from their source to a processor and then to the consumer may equal 78% of their sales price. *Hearings on H.R. 11824, H.R. 11826 & H.R. 11207 Before the Subcomm. on Surface Transp. and Aeronautics of the House Comm. on Interstate and Foreign Commerce*, 92d Cong., 2d Sess. 1220 (1972) (statement of E. Frankel).

90. *Nat'l Ass'n of Recycling v. ICC*, 585 F.2d 522, 535 (D.C. Cir. 1978) (interpreting Section 204 of the Railroad Revitalization and Regulatory Reform Act of 1976, 45 U.S.C. § 793 (1976) (repealed 1978)). Notwithstanding the congressional findings in the Act, there is no agreement among the existing studies as to whether discriminatory freight rates impair the marketability of recycled products. Compare *Ex Parte No. 310, Increased Freight Rates and Changes*, 1975, 349 I.C.C. 555, 578 (1975) (transportation rates affect the demand for recycled goods) with *Ex Parte No. 319, Investigation of Freight Rates for the Transportation of Recyclable or Recycled Materials*, [1977] 7 ENVIR. REP. (BNA) 1543-44 (rate structures do not have a significant impact on demand for scrap), *vacated and remanded*, *Nat'l Ass'n of Recycling v. ICC*, 585 F.2d 522 (D.C. Cir. 1978).

91. Munchow, *supra* note 88, at 446.

92. *Id.*

93. *Id.*

94. *Id.*

longer different from those of virgin commodities, the rate disparity should be removed. Elimination of the disparity may be accomplished through statutory changes, voluntary rate commission actions or lawsuits. As to the first, Florida has enacted a statute barring all intrastate rate discrimination.⁹⁵ Also, rate commissions, in light of the deterrent effect of the differential, may now be persuaded to eliminate the disparity. The Washington Utilities and Transportation Commission, for instance, has voluntarily equalized the rates.⁹⁶

Where the commission and legislature are unwilling to end the disparity, a lawsuit alleging the rates are illegally arbitrary might succeed. Most states statutorily prohibit all rates that are unjust, unreasonable or unjustly discriminatory.⁹⁷ But actions under these statutes have been hampered by plaintiffs' burden of proving that the rates violate the statute.⁹⁸ Complainants have failed to satisfy this burden because, among other things, they have lacked data concerning the characteristics of recycled materials and the effect of the rates on recycling.⁹⁹ Additionally, one of the factors in the reasonableness determination is the carrier's need for revenues.¹⁰⁰ In view of the financial condition of most railroads, that factor has almost always justified higher rates.¹⁰¹ Prompted in part by recognition of this built-in bias, Congress enacted the Railroad Revitalization and Regulatory Reform Act of 1976,¹⁰² which as to interstate rates shifted the burden of proof to the railroads and, as interpreted by *National Association of Recycling v. ICC*,¹⁰³ requires that the interstate rates be equalized, unless the transportation characteristics of recyclable materials justify the rate disparity.¹⁰⁴ Because of the Act and the recent innovations in shipping secondary materials, interstate rate discrimination is unlikely to

95. Florida Freight-Forwarding Act, FLA. STAT. ANN. § 323.08(6) (West Supp. 1980).

96. Conversation with K. L. Larson, Transp. Tariff Specialist, Wash. Utilities and Transp. Comm'n (March 18, 1980).

97. *E.g.*, IDAHO CODE § 61-301 (1976); IOWA CODE ANN. § 327D.12 (West Supp. 1980).

98. *See* Munchow, *supra* note 88, at 448.

99. *Id.* at 449.

100. *Id.*

101. *Id.*

102. Pub. L. No. 94-210, 90 Stat. 31 (codified in scattered sections of 49 U.S.C. (Supp. III 1979)).

103. 585 F.2d 522, 533 (D.C. Cir. 1978).

104. *Id.* at 533, 534.

persist much longer. The intrastate rates, however, are not covered by the Act and cannot directly benefit from its procedural mandates. Nevertheless, the congressional finding within the Act that rate disparity impedes increased recycling is significant. That declaration and the growing evidence on the need for reclamation should increase the cogency of arguments that intrastate rate disparities are illegal and unreasonable. A judicial finding that the disparate intrastate rates are discriminatory and unjust is now plausible.

V. DISCRIMINATORY ZONING LAWS

Recycling and resource recovery facilities must comply with all land use and zoning requirements.¹⁰⁵ In some states, an exception is made for facilities which generate electricity for distribution to utilities.¹⁰⁶

Because recycling and resource recovery involve garbage and junk, they are often indiscriminately confused with junkyards and consequently subjected to junkyard regulations. Since citizens seem to be equally unwilling to have junk hauled into and stored in their neighborhoods, zoning requirements have been promulgated that force junkyards and new reclamation facilities to inaccessible and remote areas. Some codes prevent scrap metal dealers from locating even in heavily industrialized areas.¹⁰⁷ Others prohibit junkyards from operating within 1000 feet from the edge of any interstate or federal-aid primary highway unless screened from visibility.¹⁰⁸ And, some confine recycling centers to general commercial zones.¹⁰⁹

These exclusionary zoning requirements force scrap metal processors, recyclers, and resource recovery enterprises to locate at uneconomical distances from markets and sources of supply. This affects recycling in several ways. As long as the municipal collection service neglects reclamation, an environmentally conscious discarder will have to transport his or her waste to distant facilities;

105. *E.g.*, WASH. REV. CODE §§ 35.63, 35A.63, 36.70 (1979); SEATTLE, WASH. CODE § 26.36.040(e) (1973).

106. *E.g.*, Energy Facility Siting Act, WASH. REV. CODE §§ 80.50.020(9), .020(10), .020(14) (Supp. 1980-81).

107. Gould, *Restrictive Law and the Scrap Dealer*, 4 PHOENIX Q. 7 (1972).

108. *E.g.*, WASH. REV. CODE § 47.41.030 (1979); ARK. STAT. ANN. § 76-2515 (Supp. 1979). For a small junkyard of ten acres, a fence satisfying the visibility requirement could cost \$10,000. Seattle Post-Intelligencer, Feb. 25, 1980, at 7, col. 1.

109. *E.g.*, SEATTLE, WASH. CODE § 26.36.040(e) (1973).

the incentive to do so decreases as the distance to them increases. Moreover, as noted above, the transportation rates for recycled goods are higher than those for competitive virgin materials. Hence, as the distance the recycled goods must travel increases, they become less price competitive.

Additional costs are created by the requirement that facilities be inconspicuous. To avoid being reminded of their waste, municipalities have required junkyards and scrap processors to construct eight feet high, "no-see-through" fences.¹¹⁰ Reclamation centers, in addition to having to construct these fences, must also be landscaped¹¹¹ and be aesthetically compatible with their environs.¹¹² Undoubtedly, these requirements were made for aesthetic reasons, but their effect is to require great capital outlays and limit the practice of stockpiling recyclables during periods of low market demand.

Capital expenses also are augmented by the requirement, in at least one state, that every reclamation center, including the corner newspaper recycling stand, provide toilets, hand-washing facilities, and drinking water.¹¹³ The amenities required should bear some reasonable relationship to the extent and nature of the activity at the site. The statute, however, is a monolith, requiring all facilities to meet its requirements. If strictly enforced, it could deter the construction of reclamation centers.

The reach of these discriminatory zoning laws can be averted only in limited situations. A governmental unit could engage in reclamation, and, because solid waste disposal is considered a governmental function, the government operated reclamation facility would be exempt from all zoning ordinances.¹¹⁴ Alternatively, the government entity could contract for a private party to offer reclamation services to the community. The private contractor would be considered an agent of the government and like the government would be exempt from the zoning laws.¹¹⁵

Where the zoning laws cannot be circumvented by the governmental function theory, their discriminatory effect will be avoided

110. *E.g.*, WASH. AD. CODE § 308-84-030 (1977).

111. *E.g.*, SEATTLE, WASH. CODE § 26.36.040(e) (1973).

112. *E.g.*, WASH. AD. CODE § 173-301-452 (1977).

113. WASH. AD. CODE § 173-301-456 (1977).

114. *See* 61 A.L.R.2d 970 (1958); E. MCQUILLIN, MUNICIPAL CORPORATIONS § 25.15 (3d ed. 1976).

115. *City of Medford v. Marinucci*, 344 Mass. 50, 181 N.E.2d 584 (1962); E. MCQUILLIN, MUNICIPAL CORPORATIONS § 25.15 (3d ed. 1976).

only if they are repealed or the suggestion of the Council of State Governments is implemented. The Council has suggested that a law be enacted requiring a governmental body to review all zoning laws having a substantial impact on reclamation.¹¹⁶ The reviewing body would be required to examine the costs and benefits of the zoning ordinances in light of their impact on reclamation. The virtue of the plan is that the reviewing body could make an informed decision as to whether to prefer aesthetics or increased reclamation.

VI. REGULATORY PROCEDURES IMPAIRING THE RECLAMATION OF AUTOMOBILES

The abandoned junk car¹¹⁷ problem in this country has reached major proportions. Every thirty minutes a car in some major city is being abandoned,¹¹⁸ becoming one of ten to thirty million cars either marring the countryside or lying in auto graveyards.¹¹⁹ The failure to recycle these autos results in aesthetic pollution, increased consumption of virgin resources, and concomitant environmental damage. These deleterious effects could be mitigated if the abandoned autos were recycled. Every ton of scrap iron recycled conserves one and one-half tons of iron ore, one ton of coke, and one-half ton of limestone.¹²⁰

Abandoned automobiles, however, are often not recycled for two reasons. First, compliance with the regulatory procedures gov-

116. COUNCIL OF STATE GOVERNMENTS, *supra* note 35, at 75 (environmental impact statement required on "zoning actions affecting solid waste management and recycling"). For the drawbacks of this proposal, *see* note 35 *supra*.

117. A commonly accepted definition of "abandoned junk motor vehicle" is that used in Washington. WASH. REV. CODE § 46.52.145 (Supp. 1980-81) defines an abandoned automobile as one meeting the following requirements:

- (a) Left on private property for more than twenty-four hours without the permission of the person having right to the possession of the property, or a public street or other property open to the public for purposes of vehicular travel or parking, or upon or within the right of way of any road or highway, for twenty-four hours or longer;
- (b) Three years old, or older;
- (c) Extensively damaged, such damage including but not limited to any of the following: A broken window or windshield, missing wheels, tires, motor, or transmission;
- (d) Apparently inoperable;
- (e) Without a valid, current registration plate;
- (f) Having a fair market value equivalent to the value of the scrap therein, only.

118. 1 PHOENIX Q. 3 (1969).

119. Reichert, *Recycling Abandoned Automobiles: Do Present Laws Act as Bottlenecks?*, 2 ENV'T L. 105 (1971) [hereinafter cited as Reichert].

120. *Id.* at 106.

erning their purchase is too costly. Secondly, the laws prohibiting abandonment have been ineffectual.

A. *Costly Regulatory Procedures*

The laws pertaining to the removal of abandoned autos on public property are extremely cumbersome. They generally require the car to be picked up by the police and towed to an impounding yard.¹²¹ The vehicle must be held there for a statutory period. The police must then sell the car at public auction,¹²² after first advertising the sale in a local newspaper and searching the records of the register to determine and give notice of the auction to the owner and any lienholder.¹²³ If the owner does not respond, a purchaser at the auction acquires legal ownership upon getting a certificate of title and paying a transfer fee.¹²⁴

These procedures are responsible for as much as one-half of the expenses of recycling an abandoned car.¹²⁵ The processor must go to the courthouse with the old certificate of title and pay a transfer fee of one or two dollars.¹²⁶ This is costly primarily in terms of the time consumed to make the transaction. The recycler must also pay for the costs of the public sale and notice to the owner, as well as the costs of towing the car to the impoundment area and then to the processor's location.¹²⁷ These costs of towing, storage and public sale often exceed the value of the recyclable scrap contained in the auto.¹²⁸ When the price of scrap steel is low, abandoned vehicles are not purchased to be recycled.¹²⁹

The costs of the procedures could be reduced without harming the interests they protect. A two-step process could replace the ex-

121. *E.g.*, WASH. REV. CODE § 46.52.111 (1979); *see also* COMMONWEALTH OF KENTUCKY LEGISLATIVE RESEARCH COMMISSION, SOLID WASTE: THE THIRD POLLUTANT 50 (1973) (summary of state laws on automobile abandonment) [hereinafter cited as COMMONWEALTH OF KENTUCKY].

122. *E.g.*, WASH. REV. CODE § 46.52.112 (1979); *see also* COMMONWEALTH OF KENTUCKY, *supra* note 121, at 50.

123. D. REICHERT, INSTITUTE OF SCRAP IRON AND STEEL, INC. SPECIAL REPORT: THE ABANDONED CAR CRISIS (1972), *quoted in* COMMONWEALTH OF KENTUCKY, *supra* note 121, at 50. *See also* WASH. REV. CODE § 46.52.11 (1979).

124. Reichert, *supra* note 119, at 110.

125. THOMAS G. HOGAN & ASSOCIATES, INC., AUTO HULK DISPOSAL PROJECT IN GRANT COUNTY, WASHINGTON 20 (1974).

126. Reichert, *supra* note 119, at 110.

127. *Id.*

128. *Id.* at 109, 112.

129. *Id.*

isting title laws.¹³⁰ Title could be said to pass upon the issuance of a bill of sale from the selling governmental authority to the recycler. The recycler, in turn, could be required to mail a copy of the bill of sale to the department of motor vehicles. This process would improve the profit margin in auto recycling by reducing the costs of the current title transfer laws. It would also clear the register's files of titles to cars no longer in service and prevent any improper use of the title—the primary purposes for title requirements.¹³¹

The costs of the due process procedures and the public sale also could be ameliorated. The expense of trying to locate the owner and lienholder is essentially unnecessary for they seldom respond to the notice.¹³² The lack of response is very often reflective of the value of the car. Most abandoned vehicles have no significant value; therefore, eliminating the notice requirement would not constitute a substantial taking of property without due process. Acknowledging this, the Council of State Governments has proposed that an exception to the notice requirements be made when the vehicle is of a certain age or less than a particular value.¹³³ Likewise, vehicles of minimal value could be exempted from the very expensive towing and public sale procedures.¹³⁴ The abandoned car could be directly towed from the street to a licensed scrap processor willing to purchase it.¹³⁵ By exempting low value

130. This was suggested in COUNCIL OF STATE GOVERNMENTS, *supra* note 35, at 60, as follows:

Section 9. [Disposal of Abandoned Vehicles.]

- (a) Disposal of impounded vehicles having a retail value of \$100 or less and age of 8 years or more shall be by contract or auction to persons licensed under the provisions of this Act. Abandoned vehicles with a retail value exceeding \$100 and age of less than 8 model years shall be disposed of by public sale.
- (b) Title to vehicles disposed of under the provisions of subsection (a) of this section shall be conveyed by a bill of sale issued by the state or local authority having jurisdiction on a form approved by the department. A copy of the bill of sale shall be forwarded to the department by the purchaser within 10 days.
- (c) Any subsequent sale of such vehicles is prohibited, except to a person licensed under this Act, without a certificate of title issued by the department under [the vehicle code of this State].

131. See Reichert, *supra* note 119, at 111.

132. *Id.* at 112 (citing NIPCC SUB-COUNCIL, JUNK CAR DISPOSAL 8, 34 (1976)).

133. COUNCIL OF STATE GOVERNMENTS, *supra* note 35, at 59 ("notice shall not be required if the retail value of an abandoned vehicle is \$100 or less and its age is 8 or more model years"); see also WASH. REV. CODE § 46.52.116 (1979).

134. COUNCIL OF STATE GOVERNMENTS, *supra* note 35, at 60.

135. COMMONWEALTH OF KENTUCKY, *supra* note 121, at 49-52.

autos from these regulatory procedures, the costs of recycling them would decrease. In addition, if the owner and any lienholder were entitled within a fixed period of time to submit a claim to the city for the car, their due process rights would be protected.

B. *Nonenforcement of Automobile Abandonment Laws*

A fundamental obstacle to automobile recycling is abandonment. The abandonment of a car triggers the costly title transfer, impoundment, notice, and public sale procedures discussed above. If vehicles were hauled to the scrap processor rather than abandoned on a street or in a field, these costly procedures would be avoided.

Like the landfill operator, the auto discarder fears no retribution for violating the law. The laws possibly violated by abandonment include those making abandonment a crime and assessing a fine,¹³⁶ others preventing auto storage in areas not zoned as junkyards,¹³⁷ or those fining anyone for storing cars without an auto wrecker's license.¹³⁸ These laws, however, have not deterred abandonment primarily because police departments and county health boards lack sufficient staff and resources to implement them.¹³⁹ Locating and prosecuting the offender is time consuming and expensive. And, too often, even if apprehended, the one who abandons a car is unable to pay the fine.¹⁴⁰

Several remedial suggestions have been made. The simplest one proposes heavier fines for abandonment.¹⁴¹ An alternative suggestion would make the owner of record presumptively liable for all costs of removal, storage, and disposal.¹⁴² As to the latter suggestion, the difficulty of tracing the owner undermines its effectiveness. Most abandoned cars give no indication of who is the owner of record. Moreover, neither proposal will increase deterrence until the regulatory bodies are given the necessary funds to seek and prosecute the offender.¹⁴³

136. *E.g.*, N.Y. VEH. & TRAF. LAW § 1224(7) (McKinney Supp. 1979).

137. *See* Reichert, *supra* note 119, at 114.

138. *E.g.*, N.H. REV. STAT. ANN. § 267-A:3 (1965) (owners permitting two junked cars on their property need a junkyard license).

139. Reichert, *supra* note 119, at 113.

140. *Id.*

141. ENVIRONMENTAL PROTECTION AGENCY, SECOND REPORT TO CONGRESS ON RESOURCE RECOVERY AND SOURCE REDUCTION 72 (1974) [hereinafter cited as EPA SECOND REPORT].

142. *See* WASH. REV. CODE § 46.52.112 (1979).

143. *See* EPA SECOND REPORT, *supra* note 141, at 72.

A third possibility is either to subsidize the processor who retrieves abandoned cars or to pay a bounty to those who deposit their cars with the processor.¹⁴⁴ The primary problem with this proposal is that cars are often abandoned because they no longer run and the discarder lacks the money to remove or repair them. Unless the bounty exceeds the cost of towing the car to the processor, neither the discarder nor the processor will remove it. In this age of fiscal conservation, a proposal to award bounties and subsidies of the size necessary to induce removal is not likely to meet with legislative approval.

A final suggestion commonly made is to implement "returnable bottle"-type legislation for automobiles.¹⁴⁵ It would require new car buyers to pay a charge, say \$35, repayable to whomever eventually returns the vehicle for recycling. Because of the difficulty of prosecuting anyone for abandonment, this scheme, encouraging voluntary compliance with the laws, may be the only practical solution. The major criticism of it concerns its income redistribution effects.¹⁴⁶ The new car buyer, typically a more affluent member of society, pays the charge while the person who returns a vehicle for recycling, someone traditionally with less money, would receive it. But as the new car buyer generally is a more profligate consumer and hence more responsible for pollution and decreasing resources than the person returning a car, such a redistribution may actually be equitable. Even if it is not, the benefits of increased auto recycling ought to outweigh any negative redistribution effects of the scheme.

VII. NONENFORCEMENT OF LANDFILL LAWS

In a recent survey of reclamation professionals, 75% felt the factors most definitely contributing to the process of reclamation were the environmental restrictions now placed on landfill setting and design.¹⁴⁷ They stated that these regulatory pressures, if enforced,

144. *Id.* at 73; see also H.R. 15860, 91st Cong., 1st Sess. (1970).

145. EPA SECOND REPORT, *supra* note 141, at 73. See also W. RODGERS, ENVIRONMENTAL LAW 681 (1977) [hereinafter cited as W. RODGERS].

146. W. RODGERS, *supra* note 145, at 681. Other criticisms are that the deterrent effect of the scheme is too speculative and that the scheme would be regressive in effect by requiring rich and poor alike to pay a deposit with each new car purchase. *Id.*

147. ARGONNE NATIONAL LABORATORIES, DEFINITION AND ANALYSIS OF THE BARRIERS OF THE IMPLEMENTATION OF URBAN ENERGY RECOVERY SYSTEMS 6 (1979) [hereinafter cited as ARGONNE NATIONAL LABORATORIES]. The following are

could eventually eliminate landfilling by making it too costly.¹⁴⁸ Full compliance with the environmental standards would cost landfill operators \$1.6 billion (in 1974 dollars) per year.¹⁴⁹

Enforcement of the new restrictions, however, is virtually nonexistent. Nearly two-thirds of all land disposal sites do not meet environmental standards.¹⁵⁰ Only one landfill area in the state of Washington in 1977 met both the state and federal standards.¹⁵¹ In Spokane County, Washington, there has only been one prosecution for landfill violations, though it is conceded that not a single site in the county fully complies with the sanitary codes.¹⁵²

While there are a variety of enforcement sanctions, none have proven effectual. They include revocation or suspension of operating permits, misdemeanor provisions, probationary periods of operation, forfeiture of bonds for non-compliance, and civil penalties, including injunctions and damages for nuisance actions.¹⁵³ The primary reason for the inefficacy of these sanctions is that they are seldom employed.¹⁵⁴ The agencies which possess authority to implement these sanctions, usually county health boards, are under-staffed and lack the resources to institute punitive actions. Because they lack the staff, they typically become aware of violations only if a citizen files a complaint¹⁵⁵ and often respond only by

representative requirements: a land disposal site must be operated so to provide adequate protection to ground and surface waters used as drinking water supplies; must be designed and operated in an aesthetically acceptable manner; must control decomposition gases to avoid posing a hazard to occupants of adjacent property; must maintain conditions "unfavorable" to the breeding of vectors; and must daily apply cover material to minimize fire hazards, infiltration or precipitation, odors and blowing litter; control gas venting and vectors; discourage scavenging; and provide a pleasing appearance. See WASH. AD. CODE §§ 173-301-182 to 173-301-304 (1977); 40 C.F.R. §§ 241.204-1, .205-3, .207-1, .208-1, .209-1 (1981).

148. ARGONNE NATIONAL LABORATORIES, *supra* note 147, at 6.

149. OFFICE OF TAX ANALYSIS, *supra* note 4, at 79. There it is reported that enforcing the environmental standards would increase current disposal costs by 25%.

150. *Id.*

151. DEP'T OF ECOLOGY, *supra* note 5, at 6-8.

152. SPOKANE COUNTY, *supra* note 21, at 31, 58; see *Solid Waste Management in Louisiana: A Survey of Current Regulatory Response*, 49 TUL. L. REV. 439, 452 (1975) (reporting there has only been one criminal prosecution for landfill violations in Louisiana) [hereinafter cited as *Solid Waste Management in Louisiana*].

153. See generally NATIONAL ASSOCIATION OF COUNTIES RESEARCH FOUNDATION, DIGEST OF SELECTED LOCAL SOLID WASTE MANAGEMENT ORDINANCES (1972).

154. OHIO LEGISLATIVE SERVICE COMMISSION, SOLID WASTE DISPOSAL 29 (1970) [hereinafter cited as OHIO LEGISLATIVE SERVICE COMMISSION].

155. *Id.*

sending the landfill operator a letter notifying him or her of the complaint.¹⁵⁶

Enforcement is also substantially limited by the ease with which illegal practices may be exempted from the environmental standards. Variances are readily given to landfill operators. Minnesota, for example, grants a variance if its Pollution Control Agency finds "that by reason of exceptional circumstances strict conformity with any provisions of the regulations . . . would cause undue hardship, would be unreasonable, impractical, or not feasible under the circumstances"¹⁵⁷ Wisconsin will grant an exemption from compliance after weighing "such factors as population of the area being served, amounts of waste generated, location of the disposal operation, nature of wastes, seasonal character of the operation, and other significant factors."¹⁵⁸ Such provisions have the effect of condoning almost any illegal operation when it is the only one serving the area.

Procedural and institutional loopholes also prevent effective enforcement of the landfill codes. Local district attorneys are reluctant to prosecute either their constituency or the political entities they serve.¹⁵⁹ This is particularly prevalent in small communities where only one landfill exists.¹⁶⁰

Not only are the available sanctions not used, but many of them, even if enforced, are incapable of remedying the violations. The criminal fines,¹⁶¹ usually less than \$100, are inadequate to deter violation.¹⁶² When assessed, they simply become another cost of doing business. Landfill operators also do not fear injunctions for they are not easily obtained due to the presence of minimal criminal penalties and the equities in each case. By definition, injunctive relief is available only when the remedy at law fails. Courts have denied injunctions, finding that the criminal fine, a remedy at law, will suffice to correct the harm.¹⁶³ Even when the criminal penalty is held insufficient to cure the violation, the court

156. *Solid Waste Management in Louisiana*, *supra* note 152, at 452.

157. MINN. SOLID WASTE DISPOSAL REG. § SW-1 (1981).

158. WIS. AD. CODE § NR 151.06 (1973); *see also* OHIO LEGISLATIVE SERVICE COMMISSION, *supra* note 154, at 29.

159. *Solid Waste Management in Louisiana*, *supra* note 152, at 452.

160. *Id.*

161. *E.g.*, WASH. REV. CODE § 70.05.120 (1979) (\$25-\$100 and/or up to 90 days of jail).

162. *Solid Waste Management in Louisiana*, *supra* note 152, at 452.

163. *Id.* at 456.

weighs the equities involved before granting an injunction. In a small community where only one landfill operates and it is too financially weak to make any improvements, issuing an injunction enjoining the operation of the landfill might result in depriving the community of waste disposal services. The alternative of no waste disposal has caused courts to deny injunctive relief.¹⁶⁴ Moreover, should the court rule the landfill must be closed, statutes often allow the illegal site to operate until another can be found.¹⁶⁵ Such extensions have been known to become routine.¹⁶⁶

The only way to enforce the environmental codes is to allocate more money for that goal. It has often been suggested that the imposition of heavier penalties would remedy the enforcement problem.¹⁶⁷ But, if there is not sufficient staff to detect and prosecute the offenders, the threat of heavier fines will not deter landfill violations. Similarly, where the community's sole landfill lacks the financial ability to comply with the pollution laws, monetary assistance either in the form of grants or loans will be necessary. Of the reasons given for nonenforcement, only the reluctance of local prosecuting attorneys to press for penalties can be remedied without explicitly allocating more money. That conflict of interest could be alleviated by requiring that all landfill complaints be referred to the state attorney general's office and by delegating prosecutorial responsibility to it.¹⁶⁸

VIII. LABELLING IMPEDIMENTS

Since natural resources have been historically cheap, Americans have become accustomed to having "new" products. Purchasing a "used" product was second-best, and the word "used" has acquired a connotation of inferiority. Some individuals mistakenly believe that recycled products are synonymous with "second hand," "salvaged," and "second class" goods, and thus eschew their purchase.¹⁶⁹ The recycling industry is trying to transform this negative public attitude toward reprocessed and reused materials into a more positive one by labelling such materials "recycled."¹⁷⁰ Al-

164. *Id.*

165. LEGISLATIVE COUNCIL STAFF, WISCONSIN'S SOLID WASTE MANAGEMENT POLICY 5 (1976).

166. *Id.*

167. *Solid Waste Management in Louisiana*, *supra* note 152, at 452.

168. *Id.*

169. L. KIRKLAND, *supra* note 1, at 55.

170. Munchow, *supra* note 88, at 471.

though recycled goods are as good as, if not better than, "new" goods,¹⁷¹ the negative perception has impaired market acceptance of recycled goods.

Feeding this negative feeling are the state laws requiring recycled products to be pejoratively labelled as "reused" or "reprocessed."¹⁷² In Georgia, for example, all reconditioned lubricating oils must be labelled "reprocessed or re-refined,"¹⁷³ all remanufactured items as "remanufactured,"¹⁷⁴ and any rebuilt goods as "rebuilt."¹⁷⁵ The ostensible purpose of such laws is to inform the consumer. The effect, however, is to reduce market acceptance of recycled goods.

The labelling requirements could be changed in a way to protect the consumer without remaining a barrier to the marketability of recycled goods. One approach would be simply to change "reprocessed" and "reconditioned" terms to "recycled."¹⁷⁶ Given all the recycling rhetoric of the seventies, the latter term should have less of a negative connotation. Alternatively, the current one or two word labels could be replaced with a label stating what percentage of the product is composed of recycled material.¹⁷⁷ Such an approach could be easily implemented with textiles and paper, where the percentage of recycled fibers is easily ascertainable. However, the most far-reaching and salutary approach for recycling would be the elimination of such labelling requirements. Several studies indicate that existing recycled goods are as good as their

171. 123 CONG. REC. E4967 (daily ed. 1977) (statement of Congressman Jones "that rerefined oil works as well as, if not better than, conventional oil"); L. KIRKLAND, *supra* note 1, at 38 (recycled paper can be as good as virgin paper). Problems will arise if wastes are recycled without regard to their content. For instance, converting insecticide containers into paper cups or sewage into fertilizer may create severe health risks. Sewage, when not properly treated, may be carcinogenic. See 124 CONG. REC. 7679 (1978) (statement of H. Eschwege). To avoid such dangers, legislative regulation of the use of possible contaminants is necessary. Munchow, *supra* note 88, at 469-71.

172. The same labelling discrimination exists in some federal laws. Under the Wool Products Labelling Act of 1939, 15 U.S.C. §§ 68-68j (1976), recycled fibers must be labelled either "reused" or "reprocessed."

173. GA. CODE § 73-222 (Supp. 1980); see MISS. CODE ANN. § 75-55-13 (Supp. 1979) (must be labelled as recleaned, reclaimed, refined, or used); TEX. CIV. CODE ANN. tit. 23, § 8606 (Vernon Supp. 1980) (labelled as reconditioned).

174. GA. CODE § 96-701 (1976).

175. GA. CODE § 96-702 (1976); see CAL. PENAL CODE § 537(f) (West 1979) (rebuilt storage batteries must be labelled "Rebuilt").

176. Munchow, *supra* note 88, at 472.

177. *Id.*

virgin counterparts.¹⁷⁸ The consumer thus would not be harmed by the absence of a label identifying the product as re-used. To assure no harm to the consumer, standards requiring a certain performance level for all categories of goods could be promulgated, and all recycled goods could be required to meet them.

IX. CONCLUSION

Although state and municipal governments have enacted increasingly bold legislation intended to spur reclamation, the legal impediments identified in this article remain. These laws detrimentally affecting reclamation are to varying degrees anachronistic. They were conceived when this country had seemingly inexhaustible resources. They are now, in light of the twin problems of solid waste disposal and dwindling virgin resources, inappropriate. Their reform or repeal would make reclamation economically more attractive, and making reclamation economically feasible is a necessary step in remedying this nation's resources problem.

178. See note 171 *supra*. This proposal would defeat its purpose should the public someday prefer recycled goods to virgin products.

