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ARTICLES

SMALL TOWN TRASH: A MODEL COMPREHENSIVE SOLID WASTE ORDINANCE FOR RURAL AREAS OF THE UNITED STATES

Kim Diana Connolly⁺

When I was a child in early 1970's New England, my family took our trash to the Town Dump¹ in Truro, Massachusetts.² The seagulls would soar overhead as we hurled our bags of garbage as far as we could into the middle of the large trash pile generated by the citizens of our small Cape Cod town (just over 1000 residents year round at that time, but more than ten times that number in the summer).³ The Truro "Dump" is now a transfer station,⁴ and in addition to its notoriety throughout New

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^{1.} Before my time, trash at the Truro Dump was burned. A recent Phase I analysis under the Massachusetts Contingency Plan, MASS. REGS. CODE tit. 310, §§ 40.0001-.1600 (2003), revealed that "based on sampling results, groundwater at the site has not been adversely affected and site contamination maintains a low potential to impact environmental receptors." Environmental Partners Group, Inc., Burn Dump MCP Investigation, Truro, Massachusetts, at http://www.envpartners.com/truro_burn_dump.htm (last visited Nov. 5, 2003).

^{2.} For a description of the town of Truro, see *Welcome to Truro, Massachusetts, at* http://www.truroma.org (last visited Nov. 5, 2003). *See also* Massachusetts Department of Housing and Community Development, *Truro, Barnstable County, at* http://www.state.ma.us/dhcd/iprofile/300.pdf (last visited Nov. 5, 2003).

^{3.} The official year-round Truro population, according to 1970 census figures, was 1,234. *1970 Census of the Population*, Vol. 1, Characteristics of Population, Part 23, Massachusetts, Table 10, Population of City Subdivisions: 1970 and 1960.

^{4.} Hours and Telephone Numbers, at http://capecodaccounting.com/tel.html (last visited Nov. 5, 2003). The federal definition of transfer station is a "site at which solid wastes are concentrated for transport to a processing facility or land disposal site. A transfer station may be fixed or mobile." 40 C.F.R. § 243.101(dd) (2002). States and localities may adopt, or change slightly, this definition. See, e.g., Justin St. Clair, DefineTrash Station, DAILY IBERIAN ONLINE, at http://www.iberianet.com/articles/2003/08/06/news/news/news68.txt (last visited Nov. 5, 2003) (providing the DEQ definition of a transfer station as "a solid waste processing

England because of its annual "Dump Dance," Truro's solid waste management is subject to a significant number of new legal requirements instituted since I was a child.

Truro is not alone. Nationwide, laws and regulations governing the way we deal with our garbage have changed significantly since the 1970's. Local governments typically are faced with primary responsibility for disposing of their residents' trash. Though certain

facility where solid waste is transferred from collection vehicles and placed in other vehicles for transportation"); see also Texas Commission on Environmental Quality, Rule Interpretation Summary Form, at http://www.tnrcc.state.tx.us/permitting/wasteperm/rims/330-4.002.pdf (last visited Nov. 5, 2003) ("A fixed facility used for transferring solid waste from collection vehicles to long-haul vehicles (one transportation unit to another transportation unit). It is not a storage facility such as one where individual residents can dispose of their wastes in bulk storage containers that are serviced by collection vehicles.").

- 5. *Truro*, at http://www.capecodtravel.com/towns/truro/index.shtml (last visited Nov. 5, 2003); Frommers, *Overview of Truro*, at http://www.frommers.com/destinations/truro/1754010001.html (last visited Nov. 5, 2003).
- 6. In addition to the federal requirements discussed *infra*, Part I.A, the Truro Dump must comply with Refuse Treatment and Disposal Facilities: Assignment of Sites, MASS. GEN. LAWS ANN. ch. 111, § 150A (West 2003); Criteria for Siting of Facilities, MASS. GEN. LAWS ANN. ch. 111, § 150A1/2 (West 2003); Solid Waste Facilities, MASS. GEN. LAWS ANN. ch. 21H, §§ 1-8 (West 2003); 401 Water Quality Certification For Discharge Of Dredged Or Fill Material, Dredging, And Dredged Material Disposal In Waters Of The United States Within The Commonwealth, MASS. REGS. CODE tit. 314, §§ 9.01-.13 (2003); Site Assignment Regulations for Solid Waste Facilities, MASS. REGS. CODE tit. 310, §§ 16.01–.99 (2003); and Solid Waste Facility Regulations, MASS. REGS. CODE tit. 310, §§ 19.001–.221 (2003).
- 7. For an interesting history of trash, see SUSAN STRASSER, WASTE AND WANT (2000).
- 8. See Jeffrey M. Gaba & Donald W. Stever, Law of Solid Waste, Pollution Prevention and Recycling § 1:10 (2002).

Federal involvement in regulation of disposal and recycling of nonhazardous waste . . . has to date been minimal. With the possible exception of the recently adopted criteria for municipal solid waste landfills, EPA has neither sought aggressively to implement the nonhazardous solid waste provisions of Subtitle D of RCRA nor to provide much more than lip service to promotion of waste minimization and pollution prevention.

Id.

9. By "trash" I mean solid waste generally. Defining the term "solid waste" is not easy because the definition must account for a wide variety of existing and potential disposal and recycling programs nationwide. The statutory definition of "solid waste" under the federal Resource Conservation and Recovery Act is:

[A]ny garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 1342 of title 33, or

federal and state laws place requirements on solid waste disposal and related activities, ¹⁰ the day-to-day reality of basic solid waste disposal is still in the hands of local governments. ¹¹ The manner in which local governments deal with local trash is vital, yet rural counties often have an inadequate governing local law, or none at all.

Governing law is important because people produce a significant amount of trash. United States citizens generated approximately 232 million tons of municipal solid waste in 2000, primarily in homes and workplaces--an increase of nearly 160 percent since 1960. In 2000, each person in the United States generated approximately 4.5 pounds of waste per day (which is over 1600 pounds, or about 4/5 of a ton, per person per year), a per-capita generation increase from 2.7 pounds per day in 1960. Packaging accounts for thirty percent of the volume of solid waste generated. Although conservation, reuse, recycling, and composting

source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) [42 U.S.C. §§ 2011 et seq.].

42 U.S.C. § 6903(27) (2000). The regulatory definition is slightly different:

Solid waste means garbage, refuse, sludges, and other discarded solid materials, including solid waste materials resulting from industrial, commercial, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage or other significant pollutants in water resources, such as silt, dissolved or suspended solids in industrial wastewater effluents, dissolved materials in irrigation return flows or other common water pollutants. Unless specifically noted otherwise, the term "solid waste" as used in these guidelines shall not include mining, agricultural, and industrial solid wastes; hazardous wastes; sludges; construction and demolition wastes; and infectious wastes.

- 40 C.F.R. § 243.101(y) (2002). The EPA has been engaged in a long-running struggle to revise its definition of solid waste. See U.S. Environmental Protection Agency, Definition of Solid Waste, at http://www.epa.gov/epaoswer/hazwaste/dsw (last updated Nov. 6, 2003). Despite these formal definitions, I will often use the term "solid waste" more generally throughout this article.
 - 10. See infra Parts I.A. and I.B.
- 11. See House Comm. on Energy & Commerce, State Control of Management of Municipal Solid Waste, H.R. REP. NO. 103-738 (1994).
- 12. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Municipal Solid Waste in the United States: 2000 Facts and Figures (2002), available at http://www.epa.gov/epaoswer/non-hw/muncpl/pubs/report-00.pdf. During that time, the population increased 56% and gross domestic product increased nearly 300%. Bureau of Economic Analysis, U.S. Department of Commerce, GDP and Other Major NIPA Series, 1929-2002 (2003), available at http://www.bea.doc.gov/bea/articles/2002/08august/0802gdp_&other_major_nipas.pdf.
- 13. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Municipal Solid Waste in the United States: 2000 Facts and Figures (2002), available at http://www.epa.gov/epaoswer/non-hw/muncpl/pubs/report-00.pdf.
- 14. Municipal Solid Waste Characterization Study Update Finds Landfilling Down, Recycling Up, 40 J. AIR & WASTE MGMT. ASSN. 1088 (1990).

have reduced municipal waste, most of the waste we generate still ends up in landfills.¹⁵ Many of those landfills are in rural areas.¹⁶

The United States is composed of more rural¹⁷ land than most people realize.¹⁸ Rural counties account for nearly 75% of all counties in the United States,¹⁹ and contain approximately 83% of our nation's land.²⁰ In 1990, 67.4% of the 39,500 governmental units in the United States had populations of less than 2,500 people.²¹ Although the size and complexity of rural America make it difficult to generalize, sparse populations and other factors mean that many rural areas have fewer economic and technological resources than can be found in most urban settings.²² The

Four patterns of population change seem to be emerging in rural America. These changes are often driven by scenic amenities and the characteristics of the people who seek them. One pattern appears in rural areas with growing retiree populations. Another pattern appears in states where the working age

^{15.} U.S. Environmental Protection Agency, Landfills, at http://www.epa.gov/ebtpages/wastwastelandfills.html (last visited Nov. 5, 2003) ("At present, there are more than three thousand landfills in the United States. Many are modern well-engineered facilities that are located, designed, operated, monitored, and financed to insure compliance with federal regulations.").

See Purdue University, Agricultural & Biological Engineering, Contamination Groundwater, http://pasture.ecn.purdue.edu/~agenhtml/ of at agen521/epadir/grndwtr/contamination.html (last visited Nov. 5, 2003); INGENCO, Promising Opportunities in Pennsylvania Place INGENCO on Threshold of Significant Growth, at http://www.ingenco.com/news_art6.html (last visited Nov. 5, 2003) (noting that "Pennsylvania has many landfills located in rural areas"); Ecology Center of Ann Arbor, Stop Waste Imports, at http://www.great-lakes.net/lists/enviro-mich/1997-09/msg00069.html (last visited Nov. 5, 2003).

^{17.} By "rural," I mean areas that are sparsely populated. The definition includes but is not limited to areas associated with agriculture. "Rural" is often thought of by the general public as synonymous with agricultural endeavors. See, e.g., Congressional Rural Caucus, at http://www.house.gov/emerson/crc/ ("The Congressional Rural Caucus (CRC) is a bipartisan coalition of Members of Congress who are committed to helping agricultural and rural America build stronger, more prosperous futures for current and future generations of Americans living on the family farms and ranches and in rural communities.").

^{18.} See generally General Accounting Office, Rural Development: Profile of Rural Areas (Apr. 1993), available at http://archive.gao.gov/t2pbat6/149199.pdf.

^{19.} Economic Research Serv., U.S. Dep't of Agric., Key Topics, Rural America, at http://www.ers.usda.gov/Topics/View.asp?T=104000 (last visited Nov. 5, 2003).

^{20.} Rural Policy Research Inst., Rural by the Numbers, at http://www.rupri.org/resources/rnumbers/govt/index.html (last visited Nov. 5, 2003). Information about specific states is available through Economic Research Serv., U.S. Dep't of Agric., State Fact Sheets, at http://www.ers.usda.gov/statefacts/ (last visited Nov. 5, 2003).

^{21.} Rural Policy Research Inst., *Rural by the Numbers, at* http://www.rupri.org/resources/rnumbers/govt/index.html (last visited Nov. 5, 2003).

^{22.} David A. McGranahan & Calvin L. Beale, *Understanding Rural Population Loss*, 17 RURAL AMERICA 4 (2002) ("[F]or people living in remote, very thinly settled areas, access to services can be a major problem."). Note, however, that generalizations about all rural areas are impossible. One commentator noted:

federal government sponsors a limited number of programs targeted to rural areas; however, most of these programs do not focus on solid waste disposal.²³ Financial realities facing rural areas impact many issues,²⁴ including solid waste disposal.²⁵

This article has been written for those interested in solid waste policy in a rural context, as well as for those working with local rural governments on solid waste matters.²⁶ Part I provides a brief framework

population has surged in many rural counties. Still other states have faced chaotic change, where population growth has been high in some rural counties and low in others—or even declining. Finally, in some states there has been a "rural exodus."

Katherine Sheaff, Center for the Study of Rural America, The 2000 Census and Growth Patterns in Rural America (2001), available at http://www.kc.frb.org/RuralCenter/mainstreet/MSE_1001.pdf.

- 23. U.S. Department of Agriculture, Rural Development Online, at http://www.rurdev.usda.gov/rd/aboutrd.html (last visited Nov. 5, 2003) (describing several programs designed to "help[] rural people buy, build or rent decent housing," and "create jobs by funding the growth and creation of rural businesses and cooperatives"). The rural farm population actually seems to be dropping. TZU-LING HUANG & PETER ORAZEM, RURAL POPULATION GROWTH, 1950-1990: THE ROLES OF HUMAN CAPITAL, INDUSTRY STRUCTURE AND GOVERNMENT POLICY (1997), available at http://www.econ.iastate.edu/research/webpapers/NDN0016.pdf.
- 24. McGranahan & Beale, *supra* note 22, at 11 ("U.S. national prosperity in the 1990s did not extend to many of its rural areas.").
- 25. See, e.g., Mitch Renkow, Trends in Solid Waste Management, N.C. STATE ECONOMIST (Aug. 1994), available at http://www.ces.ncsu.edu/resources/economics/waste/(last visited Nov. 5, 2003). The author points out:
 - In North Carolina, it generally falls upon counties to make the hard choices about what combination of disposal and recycling technologies to use, where to locate disposal facilities, and how to pay for the system. The current policy environment, coupled with rising land prices and increased local opposition to siting new waste disposal facilities, has greatly increased the cost of solid waste management for county governments.
- Id.; The California Integrated Waste Management Board, A Review and Assessment of Existing Closure and Postclosure Maintenance Requirements for Class III Landfills in Counties with Populations of 200,000 or Less (Dec. 1994), available at http://www.ciwmb.ca.gov/publications/Facilities/21095014.doc (last visited Nov. 5, 2003).
- 26. The stimulus for this article was work performed for a rural county government. During the spring of 2003, the University of South Carolina School of Law Environmental Law Clinic worked for Allendale County, South Carolina. See http://allendalecounty.com (last visited Nov. 5, 2003). The county engaged the clinic to draft a solid waste ordinance following citizen and County Council concerns when a proposed economic development project would have expanded a local landfill, and their existing ordinance came up short in dealing with the situation. See Chrissy Edgemon, County Council Rejects Appleton Landfill, Allendale County Citizen Leader, Feb. 21, 2001, at 1A, available at http://www.thepeoplesentinel.com/2001editions/ACL02_21.pdf; Eric Kenneth Ward, Trash Landing Allendale Group Fights Commerce Department's Recruitment of an Automobile Landfill Operator, FREE TIMES, at http://www.free-times.com/archive/coverstorarch/trashlanding.html (last visited Nov. 5, 2003). Allendale County enacted "An Ordinance Regulating Solid Waste In Allendale County," a comprehensive solid waste ordinance

of the legal and regulatory structure surrounding solid waste disposal, and discusses additional issues that rural governments should consider when drafting a solid waste ordinance. Part II presents a model solid waste ordinance for local governments to consider. The appendix lists the state agencies and major state laws for each state in the United States.²⁷

Note that this article is not a substitute for seeking site-specific legal advice.²⁸ Local ordinances are binding laws, and thus require individual attention and specialized consideration.²⁹ This article and the model ordinance are designed to serve only as a starting point for those local governments that want to enact an ordinance.³⁰ Admittedly, some rural

drafted by the Environmental Law Clinic, on July 17, 2003, which is on file with the author. The model ordinance in Part II of this article draws certain portions from Allendale County's ordinance, but has been substantially modified and reorganized to apply more generally. South Carolina Environmental Law Clinic students Anne Mjaadvedt and Max Sparwasser worked on the ordinance for Allendale County.

- 27. Rural areas outside the United States also struggle with solid waste disposal matters. The nature of this article limits the examination of the issue here to United States law. For more about international environmental law, see United Nations Environment Programme at http://www.unep.org (last visited Nov. 5, 2003). See also International Solid Waste Association, at http://www.iswa.org (last visited Nov. 5, 2003); Worldwatch Institute, at http://www.worldwatch.org (last visited Nov. 5, 2003).
- 28. Many law firms provide advice on solid waste management matters. Law firms that specialize in environmental law can be found in Martindale-Hubble Law Directory, available at http://www.martindale.com (last visited Nov. 5, 2003) or through FindLaw West Legal Directory, Environmental Law, at http://lawyers.findlaw.com/lawyer/practice/Environmental%20Law (last visited Nov. 5, 2003). A search specifying "solid waste" or "landfill" will narrow the list.
- 29. Some non-legal organizations may be available to aid in the planning and policy phases of such an undertaking, such as those listed *infra* notes 265-82 and accompanying text. In addition, local agricultural extension agents may be able to provide technical assistance. *See, e.g.,* Texas Agricultural Extension Service, The Texas A&M University System, *Solid Waste Management Program, at* http://aggie-horticulture.tamu.edu/extension/solidwaste.html (last visited Nov. 5, 2003); West Virginia University Extension Service, Center for Agriculture, Natural Resources, & Community Development, Nutrient/Waste Management, *at* http://www.wvu.edu/~agexten/wastmang/ (last visited Nov. 5, 2003); The University of Tennessee Agricultural Extension Service, Solid Waste Programming, http://knox.tennessee.edu/solid_waste_programming.htm (last visited Nov. 5, 2003).
- 30. As the Vermont Department of Environmental Conservation stated in an advisory to a model ordinance it drafted, "[t]his model ordinance is just a starting point. You should tailor this ordinance to the needs and circumstances of your own town or municipality. We recommend that you consult your Town Attorney and local solid waste management district before enacting any solid waste ordinance into law." Town of ______ Civil Ordinance Regulating the Burning and Disposal of Solid Wastes, available at http://www.anr.state.vt.us/dec/air/docs/Final%20Solid%20Waste%20Model%20Ordinance.pdf (last visited Nov. 5, 2003).

counties can afford staff and analysis that others cannot.³¹ Yet individualized scrutiny, even in cases of small local governments, almost certainly will require expert assistance.³²

^{31.} Compare the Orange County, North Carolina Solid Waste Management Department, at http://www.co.orange.nc.us/recycling/index.asp (last visited Nov. 5, 2003) (noting that the Solid Waste Management Department for that county has thirty-one full-time employees), with Government of Allendale County, South Carolina, at http://allendalecounty.com/government.htm (last visited Nov. 5, 2003) (indicating one staff member, the Director of Public Works has a job description that includes, but is not limited to, solid waste activities).

^{32.} Some less affluent local governments, such as USC Environmental Law Clinic client Allendale County, cannot afford to hire private law firms to draft a solid waste ordinance. An environmental law clinic may be able to help. There are over thirty environmental law clinics nationwide: Chicago-Kent College of Law, The Chicago Environmental Law Clinic, at http://www.kentlaw.edu/academics/peel/CELC-profile.html (last updated Nov. 25, 2003); Cleveland-Marshall College of Law, Environmental Clinic, at http://www.law.csuohio.edu (last visited Nov. 25, 2003); Columbia University Law School, Clinic. http://www.law.columbia.edu/areasofstudy/ at clinics/environment (last visited Nov. 25, 2003); Emory University School of Law, Turner Environmental Law Clinic, at http://www.law.emory.edu/turnerclinic (last visited Nov. 25, 2003); Georgetown University Law Center, Law Center Clinical Program, Institute for Public Representation, Environmental Law Projects, at http://www.law.georgetown.edu/ clinics/ipr/environmental.html (revised June 30, 2003); Golden Gate University School of Clinic, at http://www.ggu.edu/schools/ Environmental Law and Justice law/programs/jd/clinics/eljc.html (last visited Nov. 25, 2003); Northwestern School of Law Clark College, Pacific Environmental Advocacy http://www.lclark.edu/org/peac/about.html (last visited Nov. 25, 2003); Nova Southeastern University, Environmental and Land Use Law Clinic, at http://www.nsulaw.nova.edu/ law clinics/environmental & land use law.cfm (last visited Nov. 25, 2003); Pace School of Law. Pace Environmental Litigation Clinic. http://www.pace.edu/lawschool/envclinic (last visited Nov. 25, 2003); Rutgers School of Environmental Law http://law.newark.rutgers.edu/ Law-Newark. Clinic. at clinics_environment.html (last visited Nov. 25, 2003); Stanford Law School, Earth Justice Environmental Law Clinic, at http://www.law.stanford.edu/clinics/elc (last visited Nov. 25, Southern University, Environmental Justice http://www.tsulaw.edu/environ/environ.htm (last visited Nov. 25, 2003); Tulane Law School, Tulane Environmental Law Clinic, at http://www.tulane.edu/~telc (last updated Aug. 4, 2003); University of California at Los Angeles School of Law, The Frank G. Wells Environmental Law Clinic, at http://www.law.ucla.edu/students/academicprograms/ envlaw&p.html (last visited Nov. 25, 2003); University of Colorado School of Law, Natural Resources Litigation Clinic, at http://www.colorado.edu/Law/clinics/nrlc/index.htm (last modified Jan. 15, 2003); University of Denver College of Law, Environmental Law Clinic, at http://www.earthjustice.org/regional/university_of denver/index.html (last visited Nov. 2003); University of Florida College of Law, Conservation http://conservation.law.ufl.edu/ (last visited Nov. 25, 2003); University of Georgia School of Law, Environmental Law Practicum, at http://outreach.ecology.uga.edu/etowah/ main.html (last visited Nov. 25, 2003); University of Maryland School of Law, Environmental Law Clinic, at http://www.law.umaryland.edu/Environment/clinic.asp (last updated May 7, 2003); University of Michigan Law School, Environmental Law Practicum, at http://www.law.umich.edu/CentersAndPrograms/clinical/index.htm (last updated Sept. 26, 2002); University of Montana School of Law, Land Use Clinic, at

I. REGULATING SOLID WASTE

Solid waste regulation protects public health and general welfare.³³ As one local government put it,

In the past and in a more rural environment "any old canyon" or the "back 40" would suffice for a dump and the cost of disposal was essentially "free." A barrage of new laws, generated both at the Federal and State level, have now been passed which dictate how all landfills are sited, constructed, operated, closed and monitored even after closure.³⁴

To explain this "barrage" of laws that protect the environment and human health, the following section begins with an overview of the federal framework governing solid waste disposal, and continues with details and examples about the role of states in such matters. It goes on

http://www.umt.edu/law/cliniclanduse.htm (last visited Nov. 25, 2003); University of Oregon School of Law, Environmental Law Clinic, at http://www.law.uoregon.edu/ academics/centers.php (last visited Nov. 25, 2003); University of Pittsburgh School of Law, Environmental Law Clinic, at http://www.pitt.edu/~envprog/clinic.html (last edited Jan. 18, 2003); University of South Carolina School of Law, Environmental Law Courses, at http://www.law.sc.edu/environmental/envcourses.htm (last visited Nov. 25, 2003); Vermont Law School, Indian Country Environmental Justice Clinic, at http://www.vermontlaw.edu// firstnations/icejc.cfm (last updated Oct. 24, 2002); Vermont Law School, Clinic for Environmental Law and Policy, at http://www.vermontlaw.edu/elc/elcenvlawpol.cfm (last updated Jan. 14, 2003); Washington University School of Law, Interdisciplinary Environmental Clinic, at http://law.wustl.edu/Clinics/Intenv/index.html (last visited Nov. 25, 2003); Widener University School of Law, Environmental Law and Natural Resources http://www.law.widener.edu/CURRENT/PROGRAMS/CLINICAL PROGRAMS/environmental.shtml (last visited Nov. 25, 2003); Yale Law School, Environmental Protection Clinic, at http://www.yale.edu/envirocenter/clinic/clinic.html (last visited Nov. 25, 2003).

33. See Travis County, Texas, Takings Impact Assessment: Solid Waste Siting Ordinance, http://www.co.travis.tx.us/county_attorney/sw_ordinance.asp (last modified Apr. 23, 2003). As one locality states:

Negative impacts from such facilities include pathogens and other contaminants from solid waste being carried from such facilities onto adjacent land or into the air or adjacent surface and ground water, thereby subjecting nearby residents and the general public to exposure through means including direct contact with contaminated soil or water, airborne transport, or disease vectors. Furthermore, traffic, trash, odors, vermin, visual blight, and other undesirable byproducts of solid waste facilities negatively impact adjacent land and environmental resources and thus make such facilities an incompatible use of land in close proximity to lakes and streams, suburban and rural residences and neighborhoods, parks and other recreational areas, historically significant places, airports, and other land features and uses.

Id.

34. Solid Waste and Hazardous Materials Division, Solid Waste Collection and Disposal, El Dorado County, California, Landfills in the 1990's, *at* http://www.co.eldorado.ca.us/emd/solidwaste/sw_collection_disposal.html (last visited Nov. 5, 2003).

to explore three additional legal requirements pertinent to rural solid waste disposal: other relevant federal laws, environmental justice requirements, and restrictions on municipal solid waste flow control. Finally, it concludes with an assessment of additional issues that solid waste ordinance drafters should consider

A. The Federal Framework

Although solid waste governance largely is a creature of local and state law,³⁵ there is a federal framework under which it must exist.³⁶ Congress first enacted the Solid Waste Disposal Act ("SWDA") in 1965, primarily to provide federal support for development of state solid waste management plans.³⁷ The findings made by Congress in 1965 still apply today:

[I]nefficient and improper methods of disposal of solid wastes result in scenic blights, create serious hazards to the public health, including pollution of air and water resources, accident hazards, and increase in rodent and insect vectors of disease, have an adverse effect on land values, create public nuisances, otherwise interfere with community life and development [T]he failure or inability to salvage and reuse such materials economically results in the unnecessary waste and depletion of our natural resources ³⁸

Congress amended the SWDA five years later, through the Resource Recovery Act of 1970.³⁹ The 1970 Act mandated the creation of "recommended guidelines".⁴⁰ for "solid waste recovery, collection, separation, and disposal systems . . . which shall be consistent with public health and welfare, and air and water quality standards and adaptable to appropriate land-use plans."⁴¹ The 1970 Act also called on the

^{35. 5}A-35 ENVIRONMENTAL LAW PRACTICE GUIDE § 35.01 (2003).

^{36.} See Energy Information Admin., U.S. Dep't of Energy, Municipal Solid Waste (MSW) Milestones, at http://www.eia.doe.gov/kids/milestones/municipalsolidwaste.html (last visited Nov. 5, 2003).

^{37.} Solid Waste Disposal Act, Pub. L. No. 89-272, 79 Stat. 997 (1965), stating: The Secretary shall encourage cooperative activities by the States and local governments in connection with solid-waste disposal programs; encourage, where practicable, interstate, interlocal, and regional planning for, and the conduct of, interstate, interlocal, and regional solid-waste disposal programs; and encourage the enactment of improved and, so far as practicable, uniform State and local laws governing solid-waste disposal.

Id.

^{38.} *Id.* §§ 202(a)(4)-(5).

^{39.} Solid Waste Disposal Act, Pub. L. No. 91-512, 84 Stat. 1227 (1970).

^{40.} Id. § 209(a).

^{41.} Id.

Department of Health, Education and Welfare⁴² to "recommend model codes, ordinances, and statutes."⁴³

Current levels of federal oversight of solid waste came into play through the passage of the Resource Conservation and Recovery Act of 1976 ("RCRA"),⁴⁴ which completely restructured the SWDA, primarily to regulate hazardous waste.⁴⁵ The modern SWDA provides federal authority over disposal, management and clean-up of non-hazardous waste,⁴⁶ stating that environmentally sound solid waste disposal could be achieved through "[f]ederal technical and financial assistance to States or regional authorities for comprehensive planning pursuant to Federal guidelines designed to foster cooperation among Federal, State, and local governments and private industry."⁴⁷ This federal authority has three main elements: (1) criteria for sanitary landfills;⁴⁸ (2) state solid waste management plans;⁴⁹ and (3) prohibition on open dumping.⁵⁰

Federal criteria establish restrictions on the disposal of solid waste. These restrictions include limits on disposal of waste in flood plains;⁵¹

[W]hile the collection and disposal of solid wastes should continue to be primarily the function of State, regional, and local agencies, the problems of waste disposal as set forth above have become a matter national in scope and in concern and necessitate Federal action through financial and technical assistance and leadership in the development, demonstration, and application of new and improved methods and processes to reduce the amount of waste and unsalvageable materials and to provide for proper and economical solid waste disposal practices.

Id.

^{42.} This Act was enacted before the creation of the Environmental Protection Agency in 1970, Reorg. Plan No. 3 of 1970, 84 Stat. 2086. See also U.S. Environmental Protection Agency, History, Timeline 1970-1979, at http://www.epa.gov/history/timeline/70.htm (last updated Nov. 6, 2003). The Environmental Protection Agency Office of Solid Waste is now responsible for implementing this Act. See http://www.epa.gov/epaoswer/osw/mission.htm (last visited Jan. 16, 2004).

^{43.} Solid Waste Disposal Act § 209(b)(1).

^{44.} Solid Waste Disposal Act, Pub. L. No. 94-580, 90 Stat. 2795 (codified as 42 U.S.C. §§ 6901-6992k (2000)).

^{45.} See Chemical Mfr. Ass'n v. United States Envtl. Prot. Agency, 919 F.2d 158, 160 (D.C. Cir. 1990).

^{46. 42} U.S.C. § 6901(a)(4) (2000).

^{47.} Id. § 6941 (2000).

^{48. 40} C.F.R. pts. 257 and 258 (2002) (promulgated pursuant to 42 U.S.C. § 6942 (2000))

^{49. 42} U.S.C. § 6946 (2000).

^{50.} Id. § 6945.

^{51. 40} C.F.R. § 257.3-1 (2002) ("Facilities or practices in floodplains shall not restrict the flow of the base flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste, so as to pose a hazard to human life, wildlife, or land or water resources."). The regulations also provide:

proscriptions related to endangered species and their habitat;⁵² certain prohibitions on disposal in wetland locations;⁵³ limits on discharge to surface water⁵⁴ and groundwater;⁵⁵ limits on application of solid waste to land used for production of food-chain crops;⁵⁶ requirements to limit potential spread of disease;⁵⁷ requirements to protect air quality

Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions located in 100-year floodplains must demonstrate that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment. The owner or operator must place the demonstration in the operating record and notify the State Director that it has been placed in the operating record.

Id. § 258.11(a).

- 52. Id. § 257.3-2 ("Facilities or practices shall not cause or contribute to the taking of any endangered or threatened species of plants, fish, or wildlife. (b) The facility or practice shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species").
- 53. *Id.* § 258.12 ("New MSWLF units and lateral expansions shall not be located in wetlands, unless the owner or operator can make the following demonstrations to the Director of an approved State ").
 - 54. Id. § 257.3-3. The regulations require:
 - (a) . . . a facility shall not cause a discharge of pollutants into waters of the United States that is in violation of the requirements of the National Pollutant Discharge Elimination System (NPDES) under section 402 of the Clean Water Act, as amended. (b) . . . a facility shall not cause a discharge of dredged material or fill material to waters of the United States that is in violation of the requirements under section 404 of the Clean Water Act, as amended. (c) A facility or practice shall not cause non-point source pollution of waters of the United States that violates applicable legal requirements implementing an areawide or Statewide water quality management plan that has been approved by the Administrator under section 208 of the Clean Water Act, as amended.

Id.

- 55. *Id.* § 257.3-4 ("A facility or practice shall not contaminate an underground drinking water source beyond the solid waste boundary or beyond an alternative boundary specified in accordance with paragraph (b) of this section.").
 - 56. Id. § 257.3-5. This section requires that:

A facility or practice concerning application of solid waste to within one meter (three feet) of the surface of land used for the production of food-chain crops shall not exist or occur, unless in compliance with all requirements of paragraphs (a)(1) (i) through (iii) of this section or all requirements of paragraphs (a)(2) (i) through (iv) of this section.

Id.

- 57. Id. § 257.3-6. For example, the regulation states:
- (a) Disease Vectors. The facility or practice shall not exist or occur unless the onsite population of disease vectors is minimized through the periodic application of cover material or other techniques as appropriate so as to protect public health. (b) Sewage sludge and septic tank pumpings (Interim Final). A facility or practice involving disposal of sewage sludge or septic tank pumpings shall not exist or occur unless in compliance with paragraphs (b) (1), (2) or (3) of this section.

(including prohibitions on open burning);⁵⁸ restrictions linked to safety (including explosion/fire hazards and public access);⁵⁹ limits with respect to locations near airports;⁶⁰ and limits with respect to certain dangerous locations, such as on faults⁶¹ or other unstable areas.⁶²

Id.

- 58. Id. § 257.3-7 ("The facility or practice shall not engage in open burning of residential, commercial, institutional or industrial solid waste. This requirement does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, diseased trees, debris from emergency clean-up operations, and ordnance.")
 - 59. Id. § 257.3-8. These provisions are quite specific:
 - (a) Explosive gases. The concentration of explosive gases generated by the facility or practice shall not exceed: (1) Twenty-five percent (25%) of the lower explosive limit for the gases in facility structures (excluding gas control or recovery system components); and (2) The lower explosive limit for the gases at the property boundary. (b) Fires. A facility or practice shall not pose a hazard to the safety of persons or property from fires. This may be accomplished through compliance with § 257.3-7 and through the periodic application of cover material or other techniques as appropriate. (c) Bird hazards to aircraft. A facility or practice disposing of putrescible wastes that may attract birds and which occurs within 10,000 feet (3,048 meters) of any airport runway used by turbojet aircraft or within 5,000 feet (1,524 meters) of any airport runway used by only pistontype aircraft shall not pose a bird hazard to aircraft. (d) Access. A facility or practice shall not allow uncontrolled public access so as to expose the public to potential health and safety hazards at the disposal site.

Id.

60. *Id.* § 258.10 (2002). For example:

Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions that are located within 10,000 feet (3,048 meters) of any airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any airport runway end used by only piston-type aircraft must demonstrate that the units are designed and operated so that the MSWLF unit does not pose a bird hazard to aircraft.

- Id. The regulations require that the Federal Aviation Administration (FAA) and the affected airport be notified by "[o]wners or operators proposing to site new MSWLF units and lateral expansions within a five-mile radius of any airport runway end used by turbojet or piston-type aircraft." Id.
- 61. Id. § 258.13. The regulations require that new MSWLF units and lateral expansions not be:

located within 200 feet (60 meters) of a fault that has had displacement in Holocene time unless the owner or operator demonstrates to the Director of an approved State that an alternative setback distance of less than 200 feet (60 meters) will prevent damage to the structural integrity of the MSWLF unit and will be protective of human health and the environment.

Id. Also, with respect to fault zones:

(a) New MSWLF units and lateral expansions shall not be located in seismic impact zones, unless the owner or operator demonstrates to the Director of an approved State/Tribe that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site. The

Federal activities with respect to solid waste management are regulated by the United States Environmental Protection Agency ("EPA") through the Office of Solid Waste. Bublic information dissemination is an important mission of that agency. EPA also provides guidance to, and works closely with, state agencies in the implementation of state solid waste management plans and other solid waste regulation. Although the modern federal government does have an important role in solid waste management, state and local

owner or operator must place the demonstration in the operating record and notify the State Director that it has been placed in the operating record. Id. § 258.14.

62. Id. § 258.15. The regulation provides:

Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions located in an unstable area must demonstrate that engineering measures have been incorporated into the MSWLF unit's design to ensure that the integrity of the structural components of the MSWLF unit will not be disrupted. The owner or operator must place the demonstration in the operating record and notify the State Director that it has been placed in the operating record. The owner or operator must consider the following factors, at a minimum, when determining whether an area is unstable: (1) On-site or local soil conditions that may result in significant differential settling; (2) On-site or local geologic or geomorphologic features; and (3) On-site or local human-made features or events (both surface and subsurface).

Id.

- 63. U.S. Environmental Protection Agency, *Basic Information: The Office of Solid Waste (OSW)*, *at* http://www.epa.gov/epaoswer/osw/mission.htm (last updated Nov. 6, 2003).
- 64. EPA's Mission Statement includes the following phrase: "EPA's purpose is to ensure that . . . [a]ll parts of society—communities, individuals, business, state and local governments, tribal governments—have access to accurate information sufficient to effectively participate in managing human health and environmental risks." U.S. Environmental Protection Agency, Agency Mission Statement, at http://www.epa.gov/history/org/origins/mission.htm (last updated Nov. 6, 2003); see also U.S. Environmental Protection Agency, Public Involvement Policy of the U.S. Environmental Protection Agency (May 2003), available at http://www.epa.gov/stakeholders/policy2003/policy2003.pdf.
 - 65. See infra Part I.B.
- 66. Randall S. Abate & Mark E. Bennett, Constitutional Limitations on Anticompetitive State and Local Solid Waste Management Schemes: A New Frontier in Environmental Regulation, 14 YALE J. REG. 165, 170 (1997). The authors state:

Throughout RCRA there are statements indicating that Congress considers solid waste management to be a national problem. The Act contemplates that state actions should be coordinated as part of a federal environmental program. In the congressional findings section of RCRA, Congress acknowledged that state, regional, and local agencies should continue to bear primary responsibility for the collection and disposal of solid waste. Nevertheless, Congress found that the problems of waste disposal are national in scope and require federal action through financial and technical assistance and leadership in the development, demonstration, and application of new and improved methods and processes to

governments are still at the forefront when it comes to non-hazardous solid waste regulation.

B. State Implementation

As a result of federal incentives, most states have solid waste management plans.⁶⁷ The SWDA and its implementing regulations provide access to certain federal funding for states with solid waste management plans that comply with federal guidelines and are approved by the EPA.⁶⁸ The objectives of state solid waste management plans "are to develop and encourage methods of disposal which are environmentally sound and which maximize the utilization of valuable resources and which encourage resource conservation."⁶⁹

States consider various factors in designing and implementing their plans, including population density, geographic characteristics, and other regional characteristics. EPA approval necessitates meeting certain minimum requirements, such as: identifying the responsibilities of state authorities; identifying the distribution of federal funds; prohibiting the creation of new open dumps in the state; and providing for the closure or upgrade of all open dumps in existence. To design and implement a state plan, a governor must establish regulations and designate an agency to implement the plan.

As might be expected, states vary widely in their approaches to solid waste disposal.⁷⁶ In Louisiana, for example, the Department of Environmental Quality is responsible for the regulation of solid waste

reduce the amount of waste and provide for proper and economical solid waste disposal practices.

Id.

^{67.} U.S. Environmental Protection Agency, 25 Years of RCRA: Building on Our Past To Protect Our Future (2002), available at http://www.epa.gov/epaoswer/general/k02027.pdf.

^{68. 42} U.S.C. §§ 6941–6949(a) (2000); see also Guidelines for Development and Implementation of State Solid Waste Management Plans, 40 C.F.R. pt. 256 (2002).

^{69. 61}C AM. JUR. 2D Pollution Control § 1138.

^{70. 42} U.S.C. § 6942(c) (2000).

^{71.} Id. § 6943(a)(1) (2000).

^{72.} Id.

^{73.} *Id.* § 6943(a)(2).

^{74.} Id. § 6943(a)(3); 42 U.S.C. § 6945 (2000).

^{75. 42} U.S.C. § 6946 (2000). See also 61C Am. Jur. 2D Pollution Control § 1139 (EPA Approval of State Plan).

^{76.} See generally JEFFREY M. GABA & DONALD W. STEVER, LAW OF SOLID WASTE, POLLUTION PREVENTION AND RECYCLING, §1.10 (West 2002). A comprehensive history of state-level solid waste legislation in California is available at Integrated Waste Management Board, History of California Solid Waste Law, at http://www.ciwmb.ca.gov/Statutes/Legislation/CalHist (last updated Nov. 3, 2003).

disposal.⁷⁷ The Alabama Environmental Management Act gives the Alabama Department of Environmental Management control over solid waste disposal and the authority to supervise Alabama municipalities and other local governments' solid waste management activities.⁷⁸ In New Jersey, the Solid Waste Management Act established twenty-two management districts.⁷⁹ Each district is delegated responsibility for developing solid waste management programs.⁸⁰

Similarly, Ohio has delegated the responsibility of solid waste disposal to county districts. The Ohio General Assembly "yielded to local control of landfill siting and operation by allowing political subdivisions to enforce their zoning and nuisance abatement restrictions against properly licensed solid waste disposal facilities." In North Dakota, which receives solid waste from surrounding states such as Minnesota, the main goal of county regulations is to reduce the probability of adverse effects through preventative planning. States and states are disposal facilities.

A number of organizations are available to assist states in solid waste and other environmental compliance, including the Environmental Council of the States ("ECOS")⁸⁴ and EPA's State, Local, and Tribal Environmental (SLATE) Networks.⁸⁵ Further, the Appendix at the end of this article provides a list of state agencies and contact information (including web sites), as well as a current list of state laws relevant to solid waste disposal.⁸⁶

^{77.} LA. REV. STAT. ANN. § 30:2011(A)(1) (West 2003).

^{78.} ALA. CODE §§ 22-22A-1 to 22-22A-16 (2003).

^{79.} N.J. STAT. ANN. § 13-1E-19 (West 2003); Christine LaRocca, Comment, New Jersey's Solid Waste Flow Control Regulations Have Been Trashed: Are Environmental Investment Charges The Answer?, 17 PACE ENVIL. L. REV. 123, 124 (1999).

^{80.} N.J. STAT. ANN. § 13-1E-20 (West 2003).

^{81.} OHIO REV. CODE ANN. § 343.01 (Anderson 2003).

^{82.} Id. §§ 303.02, 519.02, 713.06. See Peter C. Krier, Comment, Ohio's Sanitary Landfills: State and Local Regulation of Solid Waste Disposal Facilities, 63 U. CIN. L. REV. 817, 821 (1995).

^{83.} N.D. CENT. CODE § 61-28-01 (2003); see Alice Jean Mansell, North Dakota Enters the Dumping Ground Wars: A Case Study for Incentive-Based Regulations, 69 N. DAK. L. REV. 575, 576, 583 (1993).

^{84.} See Environmental Council of the States (ECOS), at http://www.sso.org/ecos/about/about.htm (last visited Nov. 5, 2003). ECOS is "the national non-profit, non-partisan association of state and territorial environmental commissioners." Id.

^{85.} U.S. Environmental Protection Agency, State, Local, And Tribal Environmental (SLATE) Networks, at http://www.epa.gov/epahome/slate.htm (last visited Nov. 5, 2003).

^{86.} See Appendix infra pp.62-79.

C. Additional Legal Issues Associated with Local Solid Waste Disposal

By its nature, local solid waste disposal involves many legal considerations. Building on the foundational laws discussed above, certain other federal laws may apply to local solid waste activities.⁸⁷ Further, solid waste disposal may trigger environmental justice compliance requirements.⁸⁸ Finally, local decisions may be impacted by constitutional limits on restrictions local governments can place on solid waste disposal methods, sometimes referred to as "flow control."

1. Local Solid Waste Decisions and Other Federal Laws

Certain federal laws may be triggered by local decisions on solid waste transportation and disposal. Although this article cannot examine in detail all the requirements that might be initiated by the myriad environmental laws enacted by Congress⁹⁰ and various states, it can list a few of the more prevalent laws that may need consideration.⁹¹ The federal laws most frequently triggered in the context of solid waste disposal are: the Clean Air Act,⁹² the Clean Water Act,⁹³ the National Environmental Policy Act,⁹⁴ the Endangered Species Act,⁹⁵ the Safe Drinking Water Act,⁹⁶ the Comprehensive Environmental Response, Compensation and Liability Act,⁹⁷ and the Emergency Planning and Community Right-to-Know Act.⁹⁸

^{87.} See infra notes 91-97 and accompanying text.

^{88.} See infra Part I.D.

^{89.} See infra note 181 and accompanying text.

^{90.} Many different statutes and agencies regulate pollution control and interactions with the environment. One major source book identifies fifty statutes as involved in the regulation of environmental law. See Environmental Statutes Outline: A Guide To Federal Environmental Laws, Envtl. L. Rep. (Envtl. L. Inst. 3d ed. 2002); J.B. Ruhl, Malpractice and Environmental Law: Should Environmental Law "Specialists" Be Worried?, 33 Hous. L. Rev. 173, 181 (1996) (characterizing environmental law as "both structurally and administratively fractured" because "there is no unified environmental 'code' or omnibus environmental agency. Within federal environmental law, for example, no fewer than twenty-one laws form the core of environmental regulation, and over fifteen different executive branch and independent agencies have some role in implementing one or more of those laws." (footnote omitted)).

^{91.} A legal professional can help assess what requirements, if any, that might be imposed by the laws discussed in this section (or other federal laws) before enacting local laws or undertaking activities related to solid waste disposal.

^{92. 42} U.S.C. §§ 7401-7642 (2000).

^{93.} Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (2000).

^{94. 42} U.S.C. §§ 4321–4370(f) (2000).

^{95. 16} U.S.C. §§ 1531-1544 (2000).

^{96. 42} U.S.C. §§ 300f to 300j-26 (2000).

^{97.} Id. §§ 9601-9675 (2000).

^{98.} Id. §§ 11001-11050 (2000).

Solid waste disposal might trigger a number of Clean Air Act requirements. First, for example, a landfill might emit gases such as "methane, carbon dioxide, non-methane organic compounds, and hazardous air," triggering relevant regulatory obligations. Second, if incineration is a solid waste disposal option being considered by a local government, multiple Clean Air Act requirements would have to be met. Third, solid waste transportation would have to be included in required implementation plans for areas tracking mobile source emissions due to the poor quality of their air. 102

The Clean Water Act (CWA) also might affect local solid waste disposal. For example, solid waste disposal facilities are subject to effluent limitations promulgated by EPA. Solid waste disposal facilities also must manage stormwater and other runoff. Construction

^{99.} For a helpful overview of all Clean Air Act requirements, see U.S. Environmental Protection Agency, *The Plain English Guide to the Clean Air Act* (Apr. 1993), *available at* http://www.epa.gov/oar/oaqps/peg_caa/pegcaain.html. *See generally* ARNOLD W. REITZE, JR., AIR POLLUTION CONTROL LAW: COMPLIANCE AND ENFORCEMENT (Envtl. L. Inst. 2001); ARNOLD W. REITZE, JR., AIR POLLUTION LAW (Michie Butterworth 1995 & Supp. 1997).

^{100.} U.S. Environmental Protection Agency, Landfill Air Emissions Estimation Model, at http://www.epa.gov/air/oaqps/landfill.html (last visited Nov. 5, 2003).

^{101.} See 42 U.S.C. § 7429 (2000).

^{102.} U.S. Environmental Protection Agency, *Transportation and Air Quality Planning*, at http://www.epa.gov/otaq/transp.htm (last visited Nov. 5, 2003) ("EPA's Transportation Air Quality (TRAQ) Center provides state and local air quality regulators and transportation planners with access to critical information ").

^{103.} See 33 U.S.C. §§ 1251-1387 (2000). For a general overview of Clean Water Act requirements, see THE CLEAN WATER ACT HANDBOOK (Mark A. Ryan, ed., 2d ed. 2003); see also U.S. Environmental Protection Agency, Water, at http://www.epa.gov/ow/(last visited Nov. 5, 2003); U.S. Environmental Protection Agency, Overview of the National Water Program, at http://www.epa.gov/water/programs/owintro.html (last visited Nov. 5, 2003).

^{104.} Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category, 65 Fed. Reg. 3008 (Jan. 19, 2000) (codified at 40 C.F.R. pts 136 and 445). These regulations apply to most new and existing landfills regulated under Subtitles C and D of RCRA, though they do not apply to wastewater discharges from "captive" landfills—those landfills associated with other industrial or commercial activities, in most circumstances. *Id.*

^{105.} See id. § 1329 (2000). See generally U.S. Environmental Protection Agency, Polluted Runoff (Nonpoint Source Pollution), at http://www.epa.gov/owow/nps (last updated Oct. 27, 2003). Because of limited relevant federal law, nonpoint source pollution is usually regulated on a state level. ENVIRONMENTAL LAW INSTITUTE, ENFORCEABLE STATE MECHANISMS FOR THE CONTROL OF NONPOINT SOURCE WATER POLLUTION (1997), available at http://www.epa.gov/nps/elistudy/nonpoint.pdf.

of such facilities may require permits under CWA Section 404, 106 if such construction will impact "waters of the United States." 107

The National Environmental Policy Act (NEPA)¹⁰⁸ is unlike most environmental laws because it is not focused on a particular medium (such as air, land, or water) or a particular kind of thing (such as mining or endangered species).¹⁰⁹ Although it was passed with broad purposes,¹¹⁰ the most important result of the statute is that an environmental impact statement¹¹¹ must be undertaken for "major Federal actions significantly affecting the quality of the human environment."¹¹² Because federal "actions" are defined broadly to include any action undertaken, funded, or even authorized by the federal government, ¹¹³ local actions (such as landfill construction) may be determined to have sufficient federal connections that a NEPA analysis is required. A different subsection of

Id.

^{106. 33} U.S.C. § 1344(a) (2000).

^{107.} See id. § 1362(7) (2002) (defining "navigable waters" as "the waters of the United States"). For more about permitting requirements in waters of the United States, see generally United States Army Corps of Engineers, Regulatory Program Home Page, at http://www.usace.army.mil/inet/functions/cw/cecwo/reg/ (last visited Nov. 5, 2003).

^{108.} See 42 U.S.C. §§ 4321-4347 (2000); see also Council on Environmental Quality, NEPANet, at http://ceq.eh.doe.gov/nepa/nepanet.htm (last visited Nov. 5, 2003). See generally NICHOLAS C. YOST, NEPA DESKBOOK (2d. ed. 1995).

See Frank P. Grad, Treatise on Environmental Law § 9.01 (2003).

^{110. 42} U.S.C. § 4331(a) (2000). The statute states:

⁽a) The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of man, declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

^{111.} See id. § 4332(c) (2000); 40 C.F.R. pt. 1502 (2002). The Environmental Protection Agency reviews all federal Environmental Impact Statements. See U.S. Environmental Protection Agency, Environmental Impact Statement, at http://www.epa.gov/ebtpages/envienvironmentalimpactstatement.html (last visited Nov. 5, 2003) ("The EPA reviews and responds to filed impactstatements [sic] and makes available a national EIS filing system as well as publishing a weekly notice of EIS documents available for review.").

^{112. 42} U.S.C. § 4332(c) (2000).

^{113. 40} C.F.R. § 1508.18 (2002).

this article discusses how NEPA interplays with environmental justice concerns.¹¹⁴

If a listed species or designated habitat might be found in a particular locality, the Endangered Species Act (ESA) applies. Once a species is listed 6 as "endangered" or "threatened," critical habitat" might be designated. Such listing and habitat designation triggers mandatory consultation with respect to federal agency actions, which might include approvals or funding for solid waste activities, as well as prohibitions on federal agency actions that may jeopardize the listed species or adversely affect the critical habitat. Furthermore, the ESA restricts the "taking" of a listed fish or wildlife species or destruction of a listed plant species. Certain solid waste transportation and disposal activities might involve "taking" insofar as they may harm or harass listed species or impact designated critical habitat.

^{114.} See infra Part I.D. See generally Stephen M. Johnson, NEPA and SEPA's In the Quest for Environmental Justice, 30 LOY. L.A. L. REV. 565 (1997).

^{115. 16} U.S.C. §§ 1531-1544 (2000). For a brief general overview of this legislation, see U.S. Fish & Wildlife Service, ESA Basics, available at http://endangered.fws.gov/pubs/esa%20basics.pdf (last visited Nov. 5, 2003); see also ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES (Donald C. Baur & William Robert Irvin eds. 2002); LAWRENCE R. LIEBESMAN AND RAFE PETERSEN, ENDANGERED SPECIES DESKBOOK (2003).

^{116.} Two different federal agencies are responsible for listing and implementing of the Endangered Species Act: the U.S. Fish and Wildlife Service of the Department of the Interior, and the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce. See 16 U.S.C. § 1533(a)(1) (2000). See generally U.S. Fish & Wildlife Service, The Endangered Species Program, at http://endangered.fws.gov/ (last visited Nov. 5, 2003); National Marine Fisheries Service, Endangered Species, at http://www.nmfs.noaa.gov/endangered.htm (last visited Nov. 5, 2003).

^{117. 16} U.S.C. § 1533(a)(1) (2000).

^{118.} *Id.* § 1533(a)(3).

^{119.} *Id.* § 1536(a)-(b).

^{120. 50} C.F.R. § 17.21 (2002). The regulation provides:

Harass in the definition of "take" in the Act means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.

Id. § 17.3. "Harm in the definition of 'take' in the Act means an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." Id.

^{121. 16} U.S.C. § 1538(a)(1)(B) (2000).

^{122.} See id. § 1538(a).

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), ¹²³ also referred to as "Superfund," ¹²⁴ provides broad authority to respond to chemical emergencies and to clean up toxic waste sites for long-term protection. ¹²⁵ Although household wastes are excluded from regulation under RCRA, ¹²⁶ they may trigger CERCLA liability. ¹²⁷ Waste disposal is often linked to contaminated lands. ¹²⁸ In addition, many old landfills are, or have the potential to be, included as Superfund sites. ¹²⁹ In some situations, therefore, a local government may face retroactive joint, strict, and several liability for hazardous substances covered under Superfund that have been disposed of or abandoned at facilities owned or controlled by the local government. ¹³⁰

The Safe Drinking Water Act was enacted to protect drinking water nationwide. There are almost 170,000 public water systems in the United States, and solid waste disposal may involve a number of potential contaminants. Unless properly constructed, landfills may

^{123.} See CAROL STERN SWITZER, LYNN A. BULAN, STUART S. NAGEL, CERCLA: COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (2002); Savannah Environmental Consulting & Assocs., CERCLA & Other Useful Information Links, at http://www.savannahenvironmental.com/CERCLA.html (last visited Nov. 5, 2003). See generally U.S. Environmental Protection Agency, CERCLA Overview, at http://www.epa.gov/superfund/action/law/cercla.htm (last visited Nov. 5, 2003).

^{124.} U.S. Environmental Protection Agency, CERCLA Overview, at http://www.epa.gov/superfund/action/law/cercla.htm (last updated Oct. 21, 2003).

^{125.} See id.

^{126. 42} U.S.C. § 6921(i) (2000); 40 C.F.R. § 261.4(b)(1) (2002); see Paula J. Meske, The Solid Waste Dilemma: Municipal Liability and Household Hazardous Waste Management, 23 ENVTL. L. 355, 355 (1993).

^{127. 42} U.S.C. § 9607 (2000) (stating that a person who transports, generates, or arranges for disposal of hazardous wastes, or who owns/operates the facility where such wastes are stored/disposed of, may be liable under CERCLA). CERCLA actually refers to multiple other laws, including RCRA, in its definition of a hazardous substance. *Id.* § 9601(14).

^{128.} U.S. Environmental Protection Agency, *Draft Report on the Environment, Waste and Contaminated Lands*, at http://epa.gov/indicators/roe/html/roeLandWa.htm (last visited Nov. 5, 2003).

^{129.} For a list of current priority Superfund sites, see U.S. Environmental Protection Agency, National Priorities List Sites in the United States, at http://www.epa.gov/superfund/sites/npl/npl.htm (last visited Nov. 5, 2003). A list of the state-based links shows dozens of landfills are current superfund sites.

^{130.} Robert R. Kuehn, *Waste Site Liability*, in 5 ENVIRONMENTAL LAW PRACTICE GUIDE § 31.01[4] (2003).

^{131.} U.S. Environmental Protection Agency, *Public Drinking Water Systems: Facts and Figures*, *at* http://www.epa.gov/safewater/pws/factoids.html (last updated Nov. 7, 2003).

^{132.} Id.

^{133.} See U.S. Environmental Protection Agency, Potential Drinking Water Contaminant Index, at http://www.epa.gov/safewater/swp/vcontam3.html (last visited Nov. 5, 2003).

leach liquids that include dissolved substances such as heavy metals, organic decomposition products, salt, bacteria, and viruses. Open dumping likewise poses threats to drinking water and groundwater. 136

The Emergency Planning and Community Right-to-Know Act ("EPCRA")¹³⁷ is intended to "help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment."¹³⁸ EPCRA is focused on hazardous and toxic chemicals, but may come into play in certain local decisions, such as designing a process to approve an on-site landfill for a company that deals with hazardous substances.¹³⁹ Furthermore, landfills can be considered "facilities" under EPCRA and may be subject to certain reporting requirements.¹⁴⁰

^{134. 40} C.F.R. pt. 258 (2002).

^{135.} U.S. Environmental Protection Agency, Citizen's Guide to Ground-Water Protection (Apr. 1990), available at http://www.epa.gov/safewater/protect/citguid.pdf.

^{136.} See, e.g., Santo Domingo Pueblo, A Landfill and Solid Waste Dumping Ordinance, available at http://www.epa.gov/safewater/protect/gwpos/tx/santo3tx.pdf (last visited Nov. 5, 2003) ("Open and indiscriminate dumping... contaminates drinking water from underground and surfaces supplies....").

^{137. 42} U.S.C. §§ 11001-11050 (2000).

^{138.} U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, *The Emergency Planning and Community Right-to-Know Act Factsheet*, (Mar. 2000), available at http://yosemite.epa.gov/oswer/ceppoweb.nsf/vwResourcesByFilename/epcra.pdf/\$File/epcra.pdf.

^{139.} U.S. Environmental Protection Agency, Chemical Emergency Preparedness and Prevention, EPCRA Overview, at http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/epcraOverview.htm (last visited Nov. 5, 2003) ("EPCRA establishes requirements for Federal, State and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals.").

^{140.} U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Emergency Preparedness and Community Right-To-Know Act - Questions and Answers (Feb. 1999), available at http://yosemite.epa.gov/oswer/ceppoweb.nsf/vwResourcesByFilename/epcra-qa.txt/\$File/epcra-qa.txt. The EPA document states:

Because landfills meet the definition of "facility" and may in some instances present such a hazard, EPA interprets them to be subject to reporting and notification requirements under Section 302 in Subtitle A. While EPA agrees that conditions at some facilities (including landfills) may not pose significant chemical hazards even though extremely hazardous substances are present in excess of the threshold planning quantity, in other such facilities conditions will exist which do present a significant hazard. Such assessment must be made on a site-specific basis.

D. Local Solid Waste Decisions and Environmental Justice

Siting and operation of solid waste facilities are among activities often cited as raising environmental justice concerns.¹⁴¹ As one scholar has

So the next time you throw away a soda can or a piece of paper when you could recycle it, just think about the Carver Hills community of northwest Atlanta, about five miles down the street from Tech. This 2000-member African-American community of mostly elderly residents lived for many decades next to the largest operating municipal waste landfills in the southeast United States. For several years, at least two deaths per month were recorded, and have been attributed to their exposure to the landfill. Although the landfill has been closed for almost three years now, members of the community are still living with a host of health ailments, including cancer and respiratory problems.

Id. Formal histories of environmental justice often refer to a North Carolina toxic landfill as the "beginning" of the movement. See, e.g., Thurgood Marshall School of Law, Environmental Justice Clinic, Environmental Justice History, at http://www.tsulaw.edu/environ/envhist.htm (last visited Nov. 5, 2003). Providing Warren County, North Carolina, as recent example in the "Environmental Justice" movement:

In the early eighties, the State of North Carolina decided to build a toxic waste landfill in an overwhelmingly low-income and minority community in Warren County. This landfill was created for the disposal of PCB-contaminated soil, removed from fourteen counties throughout the State. Civil rights and environmental activists collaborated to stage numerous demonstrations, which resulted in the arrest of more than 500 people, including Dr. Benjamin F. Chavis, Jr.-then Executive Director of the United Church of Christ Commission for Racial Justice (and formerly the Executive Director of the National Association for the Advancement of Colored People), Dr. Joseph Lowery of the Southern Christian Leadership Conference, and Congressman Walter Fauntroy (D-DC). . . Warren County became a rallying point for those eager to see national attention focused on the inequities clearly present in the siting of unwanted land At the behest of Congressman Walter Fauntroy, the U.S. General Accounting Office (GAO) conducted a study of the states comprising Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee) "to determine the correlation between the location of hazardous waste landfills and the racial and economic status of the surrounding communities." The study's conclusions, while not surprising, were disheartening. The report found that three out of every four landfills, in EPA's Region IV, were located near predominately minority communities.

Id.; see also Sustainable Washington Alliance, Environmental Justice, at http://www.swampnet.org/swehag/b.html (last visited Nov. 5, 2003). See generally Gary Abraham, Concepts of Community in Environmental Disputes: Farmersville and Western New York's Garbage Wars, 7 BUFF. ENVTL. L.J. 51 (2000); Rachel A. Bouvier, John M. Halstead, Karen S. Conway, & Alberto B. Manalo, The Effect of Landfills on Rural

^{141.} See, e.g., Lynn Scarlett, Landfill Siting Challenges and Environmental Justice, SOLID WASTE ONLINE (Mar. 6, 2000), at http://www.rppi.org/opeds/030600.html (last visited Nov. 5, 2003); Letter from John Runkle, General Counsel, Conservation Council of North Carolina, to the National Environmental Justice Advisory Council (Dec. 11, 2000), available at http://www.conservationcouncilnc.org/archive/issues/nejac_letter.html (last visited Nov. 5, 2003); Na'Taki Y. Osborne, Environmental Justice for All, THE TECHNIQUE (1997), available at http://cyberbuzz.gatech.edu/nique/issues/winter1997/feb28/editorials2-s.html (last visited Nov. 5, 2003). Osborne recognizes:

concluded, "[1]ike the Columbia River, the flow of solid waste takes the path of least resistance, in this case, moving toward poorer, more rural, and more polluted states." Thus the avoidance of environmental injustice can become a key issue in many local solid waste decisions.

Although there is no universally accepted definition of environmental justice, ¹⁴³ most individuals think of environmental justice as an attempt to avoid causing a disproportionate impact from environmental practices and decisions on certain communities, including but not limited to communities of color and low-income communities. ¹⁴⁴ Many scholars have written excellent pieces on the concepts and problems underlying their interpretations of environmental justice. ¹⁴⁵ As one article noted:

Residential Property Values: Some Empirical Evidence, 30 J. REGIONAL ANALYSIS & POLICY 2 (2000), available at http://www.uwex.edu/ces/cced/HALST11.pdf.

- 142. Robert R.M. Verchick, *The Commerce Clause, Environmental Justice, and the Interstate Garbage Wars*, 70 S. CAL. L. REV. 1239, 1248 (1997).
- 143. As more activists and academics have become involved in working on environmental justice, in some ways it has become more defined, and in other ways it has become more amorphous. *See* U.S. Environmental Protection Agency, Environmental Justice Bibliography Database (EJBib), *available at* http://cfpub.epa.gov/ejbib/index.cfm (last visited Nov. 5, 2003) (stating that the database "contains more than 2600 records documenting the environmental justice dialogue").
- 144. Many people rely on the definition offered by the Environmental Protection Agency (EPA):

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. FAIR TREATMENT means that no group of people, including a racial, ethnic, or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies. MEANINGFUL INVOLVEMENT means that: (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; (2) the public's contribution can influence the regulatory agency's decision; (3) the concerns of all participants involved will be considered in the decision making process; and (4) the decision makers seek out and facilitate the involvement of those potentially affected.

- U.S. Environmental Protection Agency, *Environmental Justice*, *at* http://www.epa.gov/compliance/environmentaljustice/index.html (last visited Nov. 5, 2003). For general background information on environmental justice legal requirements, see THE LAW OF ENVIRONMENTAL JUSTICE (Michael B. Gerrard, ed., 1999).
- 145. See, e.g., Vicki Been, What's Fairness Got To Do With It? Environmental Justice And The Siting Of Locally Undesirable Land Uses, 78 CORNELL L. REV. 1001 (1993); Robert D. Bullard, Leveling The Playing Field Through Environmental Justice, 23 VT. L. REV. 453 (1999); Alice Kaswan, Environmental Justice: Bridging The Gap Between Environmental Laws And "Justice," 47 Am. U. L. REV. 221 (1998); Sheila Foster, Justice from the Ground Up: Distributive Inequities, Grassroots Resistance, and the Transformative Politics of the Environmental Justice Movement, 86 CAL. L. REV. 775 (1998); Richard J. Lazarus and Stephanie Tai, Integrating Environmental Justice into EPA Permitting

Hardly a day passes without the media discovering some community or neighborhood fighting a landfill, incinerator, chemical plant, or some other polluting industry. This was not always the case. Just [three] decades ago, the concept of environmental justice had not registered on the radar screens of environmental, civil rights, or social justice groups. 146

Despite the lack of an agreed-upon definition, during the 1990's activists and academics were somewhat successful in garnering governmental recognition of environmental justice as a concept worthy of attention. In 1994, President Clinton signed into law Executive Order 12,898, entitled *Federal Actions To Address Environmental Justice In Minority Populations and Low-Income Populations.* This Executive Order requires that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States." In 1990, we will be a supposed to the suppose of the su

Authority, 26 ECOLOGY L.Q. 617 (1999); Carita Shanklin, Pathfinder: Environmental Justice, 24 ECOLOGY L.Q. 333 (1997); Luke W. Cole, Environmental Justice Litigation: Another Stone In David's Sling, 21 FORDHAM URB. L.J. 523 (1994); Gerald Torres, The Future Of Environmental Regulation: Environmental Justice: The Legal Meaning Of A Social Movement 15 J.L. & COM. 597 (1996); Tseming Yang, Melding Civil Rights and Environmentalism: Finding Environmental Justice's Place in Environmental Regulation, 26 HARV. ENVTL. L. REV. 1 (2002); Robert R. Kuehn, Symposium: Environmental Justice: The Merging Of Civil Rights And Environmental Activism: Remedying The Unequal Enforcement Of Environmental Laws, 9 St. John's J. Legal Comment. 625 (1994); Hope Babcock, Environmental Justice Clinics: Visible Models of Justice, 14 Stan. Envtl. L.J. 3 (1995).

^{146.} Robert D. Bullard & Glenn S. Johnson, *Environmental Justice: Grassroots Activism and Its Impact on Public Policy Decision Making*, J. SOCIAL ISSUES (Fall 2000), *at* http://www.findarticles.com/m0341/3_56/69391504/p1/article.jhtml (last visited Nov. 5, 2003) (citation omitted).

^{147.} Although it may be over-simplistic, using the term "recognition" in this context means issuance of final policies, guidance documents, judicial decisions, or other actions by a branch of the government. Thus, Executive Order 12,898 and the ensuing guidance documents discussed below provided a response to the types of long-existing situations discussed in the previous subsection.

^{148.} Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994), reprinted in 42 U.S.C. § 4321 note, available at http://www.epa.gov/compliance/resources/policies/ej/exec_order_12898.pdf.

^{149. 42} U.S.C. § 1-101. As explained in the accompanying memorandum, Executive Order 12,898 further requires each Federal agency to "analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by the National Environmental Policy Act of 1969." Memorandum for the Heads of All Departments and Agencies entitled "Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," Feb. 11, 1994, available at http://www.epa.gov/compliance/resources/policies/ej/clinton_memo

A Presidential Memorandum accompanying the Executive Order¹⁵⁰ emphasized the importance of the public participation process under NEPA,¹⁵¹ and directed that "[e]ach Federal agency shall provide opportunities for community input in the NEPA process."¹⁵² The Council on Environmental Quality ("CEQ"),¹⁵³ the agency charged with oversight of the federal government's compliance with NEPA,¹⁵⁴ developed guidance to further assist federal agencies with their NEPA procedures so that environmental justice concerns are effectively identified and addressed.¹⁵⁵ CEQ emphasized four issues raised by Executive Order 12,898 that are important to the NEPA process: (1) agency strategies; (2) research and data; (3) subsistence impacts; and (4) meaningful access to information.¹⁵⁶

_12898.pdf (last visited Nov. 5, 2003). The Executive Order also requires each federal agency to "conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not" exclude, deny benefits to, or discriminate against any person and populations "because of their race, [c]olor, or national origin." Exec. Order No. 12,898 at § 2-2, 59 Fed. Reg. 7629 (Feb. 11, 1994); reprinted in 42 U.S.C. § 4321 note, available at http://www.epa.gov/compliance/resources/policies/ej/exec_order_12898.pdf.

150. Memorandum for the Heads of All Departments and Agencies entitled "Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," Feb. 11, 1994, available at http://www.epa.gov/compliance/resources/policies/ej/clinton_memo_12898.pdf. The Memorandum characterized the Executive Order as:

designed to focus Federal attention on the environmental and human health conditions in minority communities and low-income communities with the goal of achieving environmental justice . . . [and] intended to promote non-discrimination in Federal programs substantially affecting human health and the environment, and to provide minority communities and low-income communities access to public information on, and an opportunity for public participation in, matters relating to human health or the environment.

Id.

- 151. *Id.*; 42 U.S.C. §§ 4321-4370f (2000).
- 152. See Memorandum for the Heads of All Departments, supra note 150. The Memorandum further directed agencies to identify "potential effects and mitigation measures in consultation with affected communities and improve[e] the accessibility of meetings, crucial documents, and notices." Id.; see also U.S. Environmental Protection Agency, Office of Environmental Justice, Environmental Justice Federal Interagency Directory, (2d ed. Oct. 2000), available at http://www.epa.gov/compliance/resources/publications/ej/iwg_ej_directory_october_2000.pdf (last visited Nov. 5, 2003).
- 153. See The White House Council on Environmental Quality, at http://www.whitehouse.gov/ceq (last visited Nov. 5, 2003).
 - 154. Id.
- 155. Council on Environmental Quality, Environmental Justice: Guidance Under the National Environmental Policy Act, Dec. 1997, available at http://www.epa.gov/compliance/resources/policies/ej/ej_guidance_nepa_ceq1297.pdf (last visited Nov. 5, 2003).
 - 156. Id. at 3-4.

Led by EPA, twelve federal agencies serve on the federal Interagency Working Group on Environmental Justice ("IWG")¹⁵⁷ established under Executive Order 12,898.¹⁵⁸ The IWG has provided definitions that help identify when environmental justice requirements might come into play.¹⁵⁹ The IWG notes that a "minority population" should be identified if either the minority population of the affected area exceeds fifty-percent or the minority population in the affected area is "meaningfully greater" than the percentage "in the general population or other 'appropriate unit of geographic analysis".¹⁶⁰ A minority "community" can consist of either "groups of individuals living in geographic proximity to one another, or a geographically dispersed/transient set of individuals"

The IWG also has provided a helpful method of assessing "disproportionately high and adverse human health or environmental effects," using three factors: (1) whether there is a current or future impact that significantly and adversely affects a minority population, low-income population, or Indian tribe; (2) the significance of environmental effects and whether they have or may have an adverse impact on minority populations, low-income populations, or Indian tribes that appreciably exceeds or is likely to appreciably exceed those impacts on the general population or other appropriate comparison group; of (3) whether the environmental effects occur in a minority population, low-income population, or Indian tribe affected by cumulative or multiple adverse exposures from environmental hazards.

^{157.} See U.S. Environmental Protection Agency, Interagency Working Group on Environmental Justice, at http://www.epa.gov/compliance/environmentaljustice/interagency/index.html (last visited Nov. 5, 2003).

^{158.} Exec. Order No. 12,898 at § 1-102, 59 Fed. Reg. 7629 (Feb. 11, 1994), reprinted in 42 U.S.C. § 4321 note, available at http://www.epa.gov/compliance/resources/policies/ej/exec_order_12898.pdf (last visited Nov. 5, 2003).

^{159.} These IWG definitions are summarized in section 2.0 of Environmental Protection Agency, *Final Guidance For Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses*, Apr. 1998, *available at http://www.epa.gov/compliance/resources/policies/ej/ej_guidance_nepa_epa0498.pdf*.

^{160.} Id. at pt. 2.1.1.

^{161.} *Id.* A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds. *Id.*

^{162.} Id. at pt. 1.1.2.

^{163.} *Id.* at pt. 3.1. Such effects may include ecological, cultural, human health, economic, or social impacts on minority communities, low-income communities, or Indian tribes when those impacts are interrelated to impacts on the natural or physical environment. *Id.*

^{164.} Id.

^{165.} Id.

Other guidance documents provide helpful insight as to issues to consider with respect to environmental justice. One of the most useful is *Final Guidance For Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses*. This document provides detailed environmental factors to consider with respect to federal projects. A number of federal agencies that have not developed their own detailed guidance rely on the factors set forth in EPA's Guidance to perform environmental justice assessments. 169

In addition to ensuring compliance with any requirements that might flow from the Executive Order and resulting guidance documents discussed above, the concepts underlying environmental justice should be a goal for all local government solid waste decisions. As EPA stated in its 2001 reaffirmation of its commitment to environmental justice: [e]nvironmental justice is achieved when everyone, regardless of race, culture, or income, enjoys the same degree of protection from environmental and health hazards AND equal access to the decision-making process to have a healthy environment in which to live, learn, and work." Even if minority or low-income communities are not

^{166.} See Environmental Law Institute, Opportunities for Advancing Environmental Justice: An Analysis of U.S. EPA Statutory Authorities (2001), available at National http://www.elistore.org/reports_detail.asp?ID=41; Academy Administration, Environmental Justice in EPA Permitting: Reducing Pollution in High-Risk Communities Integral to the Agency's http://www.epa.gov/compliance/resources/publications/ei/napa-epaavailable permitting.pdf; National Academy of Public Administration, Models for Change: Efforts by Four States to Address Environmental Justice (2002), http://www.epa.gov/compliance/resources/publications/ej/napa_epa_model_4_states.pdf.

^{167.} U.S. Environmental Protection Agency, Final Guidance For Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses (Apr. 1998), available at http://www.epa.gov/compliance/resources/policies/ej/ej_guidance_nepa_epa 0498.pdf.

^{168.} Id.

^{169.} See, e.g., U.S. Army Corps of Engineers, Charleston District, Draft Environmental Impact Statement (DEIS) For The Proposed Daniel Island Marine Cargo Terminal, Appendix 5.2.3-1, Review Of Environmental Justice Guidelines (1999), available at http://www.sac.usace.army.mil/permits/Appendices/A_523-1.pdf.

^{170.} The Environmental Protection Agency offers a web site that provides relevant information for localities. U.S. Environmental Protection Agency, Environmental Justice Geographic Assessment Tool, at http://www.epa.gov/enviro/ej (last visited Nov. 5, 2003). Users can "zoom-in by specifying a city, county, state, ZIP code, watershed, EPA region, latitude/longitude, facility or address." Id. Another helpful source is a web site run by Environmental Defense, which allows visitors to research pollution via zip code. Environmental Defense, Scorecard, at http://www.scorecard.org/ (last visited Nov. 5, 2003).

^{171.} Memorandum from the Environmental Protection Agency to Assistant Administrators, General Counsel, Inspector General, Chief Financial Officer, Associate Administrators, Regional Administrators, Office Directors (Aug. 9, 2001) "EPA's

present, and special consideration is not required, local governments should strive to maximize community participation in solid waste decisions.¹⁷²

E. Local Solid Waste Decisions and Flow Control

Some state and local governments face high solid waste volumes and limited amounts of available landfill space. Based on such economic realities, certain state and local governments have tried to limit the out-of-state solid waste a landfill may accept, or have tried to direct a minimum amount of waste to certain landfills or transfer stations to ensure a funding stream for those solid waste disposal options. However, there are restrictions to such undertakings.

The Commerce Clause of the United States Constitution grants Congress the power "[t]o regulate Commerce with foreign Nations, and among the several States." Over the years, the Supreme Court has

Commitment to Environmental Justice," available at http://www.epa.gov/compliance/resources/policies/ej/admin_ej_commit_letter_081401.pdf (last visited Jan. 22, 2004) (emphasis in original).

172. For example, in May 2003, EPA released its Public Involvement Policy. U.S. Environmental Protection Agency, Public Involvement Policy, available at http://www.epa.gov/publicinvolvement/policy2003/finalpolicy.pdf ("Effective public involvement can both improve the content of the Agency's decisions and enhance the deliberative process. Public involvement also promotes democracy and civic engagement, and builds public trust in government.").

173. U.S. Environmental Protection Agency, MSW Facts and Figures: State MSW Data, at http://www.epa.gov/epaoswer/non-hw/muncpl/mswdata.htm (last visited Nov. 5, 2003). This was considered to be a bigger problem about a decade ago. See, e.g., Michael R. Harpring, Comment, Out Like Yesterday's Garbage: Municipal Solid Waste and the Need for Congressional Action, 40 CATH. U. L. REV. 851 (1991). The author states:

Across the United States a problem has been growing for decades. The problem is garbage. Municipal solid waste (MSW) is generated today at unprecedented rates, while landfills are closing faster than ever. The problem is especially pronounced in the industrialized states and municipalities, which are the first to run short of disposal capacity. Because of their diminished landfill space, many states export waste to distant disposal sites throughout the nation.

Id. at 851-852 (footnotes omitted). However, nine states and the District of Columbia are running out of landfill space. See U.S. Environmental Protection Agency, Municipal Solid Waste: Years of Remaining Landfill Capacity, at http://www.epa.gov/epaoswer/non-hw/muncpl/longdesc/4-9longdesc.htm (last visited Nov. 5, 2003).

174. See City of Philadelphia v. New Jersey, 437 U.S. 617 (1978); C&A Carbone, Inc. v. Town of Clarkstown, 511 U.S. 383 (1994).

175. There are some scholars who disagree in principal with limits on any such restrictions. See, e.g., Verchick, supra note 142, at 1309 ("In contrast to isolationism, state or local restrictions on waste transportation can also reflect responsible concerns for distributional fairness, political inclusion, and sound ecology.").

176. U.S. CONST. art. I, § 8, cl. 3.

interpreted the term "commerce" very broadly, ¹⁷⁷ though in recent years courts have found certain limits on Congress' Commerce Clause power. ¹⁷⁸ More important in the context of solid waste regulation, the clause has been interpreted as a limit on state and local laws, under a concept referred to as the "dormant" Commerce Clause. ¹⁷⁹ Because the Constitution grants Congress the power to regulate interstate commerce, states and local governments cannot pass laws that unduly burden such commerce. ¹⁸⁰ Even if Congress is silent concerning an area of interstate commerce, states and local governments may regulate only if there is both a legitimate local purpose and the law does not unduly burden interstate commerce. ¹⁸¹

As the Third Circuit has stated, "[g]arbage, however unpleasant or unwanted, carries substantial value for those with the desire or know-

^{177.} Gibbons v. Ogden, 22 U.S. (9 Wheat) 1, 206 (1824); Wickard v. Filburn, 317 U.S. 111, 125 (1942). See PAUL R. BENSON, JR., THE SUPREME COURT AND THE COMMERCE CLAUSE, 1939-1970 345 (1970). Benson characterized the reach of the Commerce Clause in 1970 by stating:

Congress, under the authority of the Commerce Clause, is able to reach into every nook and cranny of the highly interdependent American economic system. It has unquestioned control over any business activity which in any way "affects" commerce, regardless of how "local" that activity may be, how remote or "indirect" its effect may be, and how small or insignificant the contribution of a single instance may be if it is representative of "many others similarly situated."

Id. at 345.

^{178.} United States v. Lopez, 514 U.S. 549, 567 (1995) (holding the Gun-Free School Zones Act of 1990 exceeded congressional authority under the Commerce Clause); United States v. Morrison, 529 U.S. 598, 617 (2000) (holding the civil remedies provision of the Violence Against Women Act exceeded congressional authority under the Commerce Clause).

^{179.} LAURENCE H. TRIBE, AMERICAN CONSTITUTIONAL LAW § 6-5, Judicial Review of State Regulation of Interstate Commerce: Contemporary Doctrine and the Theme of Political Representation (3d ed. 2000). See also RONALD D. ROTUNDA & JOHN E. NOWAK, TREATISE ON CONSTITUTIONAL LAW, SUBSTANCE AND PROCEDURE Vol. 2, Ch. 11, The Commerce Clause and Restrictions on State Regulatory Powers (3d ed. 1999).

^{180.} The so-called "dormant" Commerce Clause applies whenever Congress "has not affirmatively acted to either authorize or forbid the challenged state activity." Norfolk S. Corp. v. Oberly, 822 F.2d 388, 392 (3d Cir. 1987). See Donald H. Regan, The Supreme Court and State Protectionism: Making Sense of the Dormant Commerce Clause, 84 MICH. L. REV. 1091 (1986).

^{181.} TRIBE, *supra* note 179, at 408. State regulation of interstate commerce may be allowed "if (a) the regulation is rationally related to a legitimate state end, and (b) the regulatory burden imposed on interstate commerce, and any discrimination against it, are outweighed by the state interest in enforcing the regulation." *Id.* (footnote omitted). *See also* Michael E. Smith, *State Discriminations Against Interstate Commerce*, 74 CAL. L. REV. 1203, 1232-33 (1986) (noting that the Supreme Court has found legitimate state interests in the regulation of "highway and employee safety," "healthful milk, air, and water," "racial equality, household privacy, and protection of natural resources").

how to dispose of it."¹⁸² Thus, certain activities with respect to solid waste, including its transportation, have been interpreted as "commerce" and therefore subject to certain restrictions. The appropriate level of limitations on the interstate transportation of solid waste under the dormant Commerce Clause was considered some time ago by the Supreme Court in *City of Philadelphia v. New Jersey*. In *City of Philadelphia*, the state of New Jersey enacted a statute that banned, with a few narrow exceptions, the importation of solid or liquid waste originating outside the state's borders. The Supreme Court held the state law unconstitutional because nondiscriminatory alternatives were available to achieve the end of decreased in-state dumping. Is

Nevertheless, "[a]s solid waste output continues apace and landfill capacity becomes more costly and scarce, state and local governments are expending significant resources to develop trash control systems that are efficient, lawful, and protective of the environment." To that end, many communities or states attempted to institute so-called "flow control" laws, swhich dictate where a community's garbage must be processed or disposed. By enabling a local government to control the processing and disposal of its garbage, through requiring that all municipal waste be shipped to a designated facility, "flow control" is intended to guarantee a stream of revenue to that facility. Local

^{182.} Atlantic Coast Demolition & Recycling Inc., v. Bd. of Chosen Freeholders of Atlantic County, 112 F.3d 652, 657 (3d Cir. 1989).

^{183.} City of Philadelphia v. New Jersey, 437 U.S. 617 (1978). See Christine A. Klein, The Environmental Commerce Clause, 27 HARVARD ENVTL. L. REV. 1, 49-50 (2003).

^{184. 437} U.S. 617 (1978).

^{185.} Id. at 618.

^{186.} *Id.* at 626-27. For an excellent analysis of this case, see Harpring, *supra* note 173, at 868-72.

^{187.} C & A Carbone, Inc. v. Town of Clarkstown, 511 U.S. 383, 385-86 (1994).

^{188.} U.S. Environmental Protection Agency, Flow Control and Municipal Solid Waste, at http://www.epa.gov/epaoswer/non-hw/muncpl/flowctrl.htm (last visited Nov. 5, 2003) ("Flow controls are legal provisions that allow state and local governments to designate the places where municipal solid waste (MSW) is taken for processing, treatment, or disposal."). See also National Ass'n of Counties, Waste Flow Control (2003), at http://www.naco.org/ContentManagement/ContentDisplay.cfm?ContentID=7057 (last visited Jan. 22, 2004).

^{189.} House Comm. on Energy & Commerce, State Control of Management of Municipal Solid Waste, H.R. REP. No. 103-738 (1994). See Michael D. Diederich, Jr., Does Garbage Have Standing?: Democracy, Flow Control and a Principled Constitutional Approach to Municipal Solid Waste Management, 11 PACE ENVTL. L. REV. 157 (1993); Donald Maurice Kreis, Comment Love of Landfill: Trashing the Maine Constitution to Solve a Garbage Problem, 45 MAINE L. REV. 81 (1993).

^{190.} See H.R. REP. No. 103-738 (1994); see also James E. McCarthy, Congressional Research Service, Flow Control of Solid Waste: Issues and Options (May 16, 1995),

governments have relied on this revenue to fund activities such as recycling, composting, hazardous waste collection, and construction of state-of-the-art processing and disposal facilities.¹⁹¹

In C & A Carbone v. Town of Clarkstown, the United States Supreme Court rejected a municipal flow control ordinance. In Carbone, the town set up an ordinance that required all garbage haulers to use one specific transfer station for disposing of nonhazardous solid waste. In 1994, the Court concluded that although the intent of the ordinance was local (the town frankly asserted that its purpose was to finance the new transfer station), the economic impact of the ordinance was interstate, and therefore an invalid action pursuant to the Commerce Clause. Thus, Carbone informed state and local governments that they cannot regulate to favor a specific solid waste enterprise, even if such regulation is equally adverse to other local and non-local interests.

The Carbone decision did not halt either the enactment of flow control ordinances or disputes surrounding such laws. For example, a flow control ordinance was at issue in the 1996 decision in Empire Sanitary Landfill v. Department of EnvironmentalResources, where a Pennsylvania county ordinance required that all waste generated within a municipality for a ten-year period be disposed of at one of three designated sites. The Pennsylvania Supreme Court held the state statute unconstitutional. Likewise, in a 1997 decision, the Third

available at http://www.ncseonline.org/nle/crsreports/waste/waste6.cfm?&CFID=12227211 &CFTOKEN=73991868.

^{191.} *Id. See* H.R. REP. No. 103-738 (1994); *see also* Government Finance Officers Association (GFOA), *Municipal Solid Waste Management* (June 2002), *available at* http://www.gfoa.org/flc/briefs/062702/flowcontrol.06.02.pdf (last visited Nov. 5, 2003).

^{192. 511} U.S. 383, 386 (1994).

^{193.} Id. at 387.

^{194.} Id. at 389.

^{195.} Id. at 393-95. Various scholarly interpretations of Carbone and its aftermath are available, including Randall S. Abate and Mark E. Bennet, Constitutional Limits on Anticompetitive State and Local Solid Waste Management Schemes: A New Frontier in Environmental Regulation, 14 YALE J. ON REG. 165 (1997).

^{196.} Empire Sanitary Landfill, Inc. v. Dept. of Envtl. Resources, 684 A.2d 1047, 1051 (Pa. 1996).

^{197.} Id.

^{198.} Id. at 1057. The court stated:

as applied, the Ordinance burdens interstate commerce. The burdens arise from the application of relevant statutes and administrative policy which do not permit the transportation of County-generated waste to out-of-state facilities and which fall more heavily on out-of-county facilities. Out-of-state facilities are not on equal footing with in-state or in-county facilities in competition for this article of commerce.

Id. For a good summary of this decision, see Donald R. Palladino, Recent Decision: Constitutional Law-Interstate Commerce-Dormant Commerce Clause-Municipal

Circuit (while acknowledging the negative economic impact of its decision) held New Jersey's flow control regulations unconstitutional. In addition, the Fourth and Sixth Circuits have made similar determinations. 200

Only one approach has been successfully used to enact constitutional flow control ordinances. This approach, the "market participant" doctrine, provides an exemption to the restrictions of the Commerce Clause for government actors that are "participating" in, rather than regulating, the market. For example, in SSC Corp. v. Town of Smithtown, the Second Circuit used the market participation doctrine to hold constitutional a waste hauling contract requiring all waste collected within a town to be disposed of at a designated facility.

Waste Control—The Supreme Court of Pennsylvania Held that a Municipal Waste Flow Control Plan Violated the Commerce Clause of the United States Constitution Because the Plan Required that All Municipal Waste Generated Within the Municipality for Ten Years Be Disposed of at One of Three Designated Sites, 36 Duq. L. Rev. 689 (1998).

199. Atlantic Coast Demolition and Recycling Inc. v. Bd. of Chosen Freeholders of Atlantic County, 112 F.3d 652, 673 (3d Cir. 1997) (holding that New Jersey "must now open up their waste disposal system so that out-of-state facilities and operators can compete for designation by the waste management districts. We cannot allow the State to deny or delay its obligation to open up the system because of the economic impact of our decision.").

200. Waste Mgmt. Holdings, Inc. v. Gilmore, 252 F.3d 316 (4th Cir. 2001); Huish Detergents, Inc. v. Warren County, 214 F.3d 707 (6th Cir. 2000). For a good analysis of *Huish*, see Benjamin D. Allen, *Trash in the Courtroom: The Problem of Solid Waste Control Ordinances After* Huish Detergents, Inc. v. Warren County, 16 J. OF NAT. RESOURCES AND ENVTL. LAW 307 (2002).

201. See, e.g., Hughes v. Alexandria Scrap Corp., 426 U.S. 794 (1976); SSC Corp. v. Town of Smithtown, 66 F.3d 502 (2d Cir. 1995); White v. Massachusetts Council of Constr. Employers, 460 U.S. 204 (1983); Red River Serv. Corp. v. City of Minot, 146 F.3d 583 (8th Cir. 1998). See Maryellen Suhrhoff, Comment, Solid Waste Flow Control and the Commerce Clause: Circumventing Carbone, 7 Alb. L.J. SCI. & TECH. 186, 196 (1996).

202. SSC Corp. v. Town of Smithtown, 66 F.3d 502, 510 (2d Cir. 1995). The court noted:

At the threshold of its Commerce Clause analysis, the Supreme Court has drawn an important distinction between "regulation" of, and "participation" in, a market. When a state engages in market "participation"—that is, when it enters the open market as a buyer or seller on the same footing as private parties—there is less danger that the state's activity will interfere with Congress's plenary power to regulate the market.

Id.

203. *Id.* at 517. The language at issue in the local ordinance was "[n]o person authorized to collect or transport acceptable waste within the Town of Smithtown shall dispose of acceptable waste generated within the Town of Smithtown except at a solid waste management facility designated by the Town Board pursuant to this section." *Id.* at 507. *See also* USA Recycling Inc. v. Town of Babylon, 66 F.3d 1272 (2d Cir. 1995), *cert. denied*, 517 U.S. 1135 (1996).

Attempts during the past decade to pass federal flow control legislation repeatedly have failed. Some municipalities have developed other fiscally-responsible ways to deal with solid waste disposal, including "pay as you throw" and other incentives. The upshot for local governments is that over the past decade or so the courts have placed some restrictions on "flow control" options to deal with solid waste management, and an attorney should carefully scrutinize any such proposed restrictions.

F. What Additional Issues Should Drafters of Rural Solid Waste Ordinances Consider?

As demonstrated in the previous section, many factors should be considered with respect to solid waste management. Ultimately, local governments have the responsibility of enacting laws that will work best for their locality. ²⁰⁸ To fit with local realities, local laws on solid waste

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^{204.} See, e.g., H.R. 2323, State and Local Government Interstate Waste Control Act of 1995, 104th Cong. (1995); S. 899, Municipal Solid Waste Disposal Act of 1997, 105th Cong. (1997); S. 663, Solid Waste Interstate Transportation and Local Authority Act of 1999, 106th Cong.; H.R. 1214, Municipal Solid Waste Flow Control Act of 2001, 107th Cong. (2001). See also Waste Expo, On Deck in 2002, at http://wasteexposhow.com/ar/waste_deck (last visited Nov. 5, 2003).

^{205.} See Paula C. Murray & David B. Spence, Fair Weather Federalism and America's Waste Disposal Crisis, 27 HARV. ENVTL. L. REV. 71, 103 (2003). The authors state:

We believe that there is a solution to the waste disposal problem that avoids legal impasse in courts and Congress. By exercising its solid waste management plan approval authority more broadly under RCRA, EPA may be able to help states craft solid waste management plans that internalize disposal costs, help preserve and protect precious landfill resources, and address environmental justice concerns. There can be a truce in the trash war.

^{206.} U.S. Environmental Protection Agency, Pay As You Throw, at http://www.epa.gov/payt/comm.htm (last visited Nov. 5, 2003) (recognizing that "[i]n communities with pay-as-you-throw programs . . . residents are charged for the collection of municipal solid waste—ordinary household trash—based on the amount they throw away. This creates a direct economic incentive to recycle more and to generate less waste.").

^{207.} See, e.g., Ecopolicy Center for Agricultural Environmental and Resource Issues, Beyond Flow Control: Economic Incentives For Better Solid Waste Management in Mercer County, New Jersey, available at http://policy.rutgers.edu/papers/2.pdf (last visited Nov. 5, 2003); Molly K. Macauley, Eduardo Ley, and Stephen W. Salant, Spatially and Intertemporally Efficient Waste Management: The Costs of Interstate Trade Restrictions, 43 J. ENVIL. ECON. & MGMT. 188 (2002), available at http://econwpa.wustl.edu/eps/pe/papers/9606/9606001.pdf.

^{208.} The role of local governments in environmental regulation has been increasing in recent years. See, e.g., Pamela Corrie, An Assessment of the Role of Local Government in Environmental Regulation, 5 U.C.L.A. J. ENVTL. L. & POL'Y 145 (1986) ("It is essential that local governments, which have characteristically been granted a relatively

(and other matters) naturally take many shapes and sizes. Examples of various approaches to solid waste matters abound, and finding local law through the internet has become easier. While at this time there is no one location for all municipal and county codes, by searching a number of sources one can find many local laws.²⁰⁹

This subsection builds on the previous analysis to highlight other broad issues that local governments should consider when contemplating a solid waste regulatory scheme. This subsection discusses breadth of coverage, documentation requirements, transportation requirements, disposal requirements, fees, special wastes, and recycling.

1. Breadth of Coverage

In most cases, local governments would benefit by enacting a single ordinance that covers all aspects of solid waste.²¹¹ Many local governments have ordinances that cover only single, often small matters,²¹² while other local governments have multiple ordinances

insignificant role in controlling environmental issues, step forward to assume a greater leadership role in this field.").

209. The following sources provide links to local laws nationwide: LEXISNEXIS Municipal Codes Web Library, Seattle Public Library's Municipal Codes On-Line, American Legal Publishing, Municode.Com, General Code Publishers, the FEIN Group, and Sterling Codifiers. See LexisNexis, Municipal Codes Web Library, at http://www.bpcnet.com; Seattle Public Library, Selected Web Sites, Municipal Codes, at http://www.spl.org/selectedsites/municode.html (last visited Nov. 5, 2003); American Legal Publishing Corporation, Online Library, at http://www.amlegal.com/online_library.htm (last visited Nov. 5, 2003); Municipal Code Corporation, Online Codes, at http://www.municode.com/index.asp?nav=2&id=1 (last visited Nov. 5, 2003); General Code, Municipal Codes on the Internet, at http://www.generalcode.com/webcode2.html (last visited Nov. 5, 2003); The FEIN Group, Available infobases, at http://nt2.scbbs.com/cgi-bin/om_isapi.dll?clientID=113941 (last visited Nov. 5, 2003); Sterling Codifiers, Codes Online, at http://66.113.195.234/online.htm (last visited Nov. 5, 2003).

210. Certain additional minor decisions are discussed in conjunction with the model ordinance that follows.

211. See, e.g., Steele County Solid Waste Ordinance #27, available at http://www.co.steele.mn.us/ENVSERV/ord27.html (last visited Nov. 5, 2003); Otter Tail County Solid Waste Ordinance, available at http://www.co.otter-tail.mn.us/solidwaste/SolidWasteOrdinance20012.pdf (last visited Nov. 5, 2003); City of Hickory Solid Waste Ordinance, Ch. 13, available at http://www.ci.hickory.nc.us/publicdocs/otherpublicdocs/solidwasteordinance.pdf (last visited Nov. 5, 2003); Code of Ordinances, City of Clearwater, Florida, Chapter 32 Utilities, Article VII Solid Waste Management, available at http://www.clearwater-fl.com/gov/depts/solid_waste/pdf/SolidWasteOrdinance10-99.pdf (last visited Nov. 5, 2003); City of Portsmouth, Solid Waste, Yard Waste And Recycling, available at http://www.cityofportsmouth.com/publicworks/solidwasteordinace02.pdf (last visited Nov. 5, 2003).

212. Sonoma County, Cal., Ordinance 4013 (June 6, 1989), at http://www.ilsr.org/recycling/sonoma_ordinance.pdf (last visited Nov. 5, 2003); Alameda County, Cal., Construction and Demolition Debris Model Ordinance (Nov. 17, 1999),

dealing with solid waste matters.²¹³ In most cases it is best to dedicate one document to providing complete, comprehensive guidance to citizens, staff, and other stakeholders on all matters related to solid waste in a locality.²¹⁴ Such an undertaking may seem daunting, but should be made easier by the guidance in this article.²¹⁵ Regardless of the breadth of coverage, very specific language on practices subject to change means that local developments (such as changes in solid waste transportation arrangements or fee changes) may require updates to local laws.²¹⁶

2. Documentation Requirements for Facilities Seeking To Locate in a Particular Local Jurisdiction

As discussed above, entities seeking to construct a solid waste management facility must comply with various state and federal requirements.²¹⁷ Yet, without specific requirements under local law, local

http://www.stopwaste.org/model.html (last visited Nov. 5, 2003); ANDERSON, S.C., CODE OF ORDINANCES ch. 58, § 39 (2001), available at http://www.municode.com; BEAUFORT COUNTY, S.C., CODE OF ORDINANCES ch. 62, § 184 (2002), available at http://www.municode.com; CHARLESTON COUNTY, S.C., CODE OF ORDINANCES ch. 10, § 22 (2000), available at http://www.municode.com; GEORGETOWN COUNTY, S.C., CODE OF ORDINANCES ch. 8, § 23 (2002), available at http://www.municode.com; GREENVILLE COUNTY, S.C., CODE OF ORDINANCES ch. 9, art. VI, § 125 (2002), available at http://www.municode.com; HORRY COUNTY, S.C., CODE OF ORDINANCES ch. 10, art. II, § 16 (2003), available at http://www.municode.com; LEXINGTON COUNTY, S.C., CODE OF ORDINANCES ch. 54, § 39 (2001), available at http://www.municode.com; PICKENS COUNTY, S.C., CODE OF ORDINANCES ch. 34, § 33 (2002), available at http://www.municode.com; Town of Garner, NC, Weekly Trash and Yard Waste Collection, available at http://www.ci.garner.nc.us/PW-Weekly%20Curbside%20Trash% 20Collection.htm (last visited Nov. 5, 2003).

- 213. See, e.g., An Ordinance To Provide For The Collection And Disposal Of Solid Waste Within The Township Of Negaunee, available at http://www.mqtinfo.org/downloads/garbageord.pdf (last visited Nov. 5, 2003).
- 214. See, e.g., An Ordinance Of The Ventura County Board Of Supervisors Repealing And Enacting Provisions Of The Ventura County Ordinance Code Pertaining To The Regulation Of Solid Waste, available a http://www.ventura.org/envhealth/programs/solid_waste/sword.htm (last visited Nov. 5, 2003).
- 215. Another helpful source is SOUTHERN RURAL DEVELOPMENT CENTER, DECISION AIDS FOR MUNICIPAL SOLID WASTE MANAGEMENT IN RURAL AREAS: AN ANNOTATED BIBLIOGRAPHY (1995).
- 216. See, e.g., LSA ASSOCIATES, INC., SOLID WASTE, ENERGY, AND COMMUNICATIONS (Livermore General Plan Steering Comm., Working Paper, July 2002), available at http://www.livermoregeneralplan.org/Working%20Papers/7.23/wstnrgtel.pdf (noting that the City of Alameda enacted a solid waste management ordinance, effective August 1, 2002, to reflect changes in the franchise agreement with waste management); Changes and Additions to Section 8.16 of the Sunnyvale Municipal Code Regulating Solid Waste Management, at http://sunnyvale.ca.gov/199906/rtcs/99-284.asp (last visited Nov. 5, 2003) (proposing "additions and changes that match current City services and make existing City policies more enforceable.").
 - 217. See supra Parts I.A to I.B.

governments generally will not see any required documents and reports explaining the plans and impacts of the proposed facility. Local governments, however, should generally want access to that information, and can mandate via local laws that copies of existing reports be provided to them. Local governments would likely want to include all facilities, including transfer stations (collection sites where solid waste is gathered for transportation to a landfill or other facility), in such documentation requirements. Local governments also may choose to impose documentation requirements over and above those required by state or federal regulators, when such additional requirements may be important for the protection of local citizens.

3. Transportation Requirements

Subject to flow control restrictions, ²²² local governments have significant control over how solid waste is transported into, out of, and through their localities. ²²³ Local governments will need to consider how and whether to license haulers, and what types of requirements to place on those persons transporting solid waste. ²²⁴ The nature of solid waste

^{218.} For example, in South Carolina, a party proposing to construct, modify, or operate a solid waste processing facility must submit a series of engineering reports, plans, and specifications, and a design report to the South Carolina Department of Health and Environmental Controls. S.C. CODE ANN. REGS. R. 61-107.6(D) (2001). These reports and plans are to include specifics on proposed activities and potential impact to the site and surrounding areas. *Id.*

^{219.} See supra note 4 for formal definitions of the term "transfer station."

^{220.} For example, Richland County, South Carolina, requires applicants to submit "[a]ny and all applications, specifications, letters, sampling results, and/or other written or recorded materials that are or have been submitted to" the state-level regulatory agency. RICHLAND COUNTY CODE, ch. 12, § 12-46(a)(1).

^{221.} For example, Richland County, South Carolina, requires applicants to submit to the County Council information over and above the basic information submitted to the state. RICHLAND COUNTY CODE, ch. 12, § 12-46(a)(2).

^{222.} See supra Part I.E.

^{223.} See, e.g., S.C. CODE ANN. §§ 44-55-1030.

^{224.} See, e.g., El Dorado County, Solid Waste Collection and Disposal, Garbage Collection Franchise History, at http://www.co.el-dorado.ca.us/emd/solidwaste/sw_collection_disposal.html (last visited Nov. 5, 2003). One option is to "franchise" hauling operations. For example:

El Dorado County, the City of Placerville, and the City of South Lake Tahoe have entered into franchise agreements with solid waste companies, which provide solid waste collection, recycling, and disposal. During the 1950's, garbage collection franchise areas were established within portions of the County, and private companies were issued exclusive contracts to haul garbage within these assigned areas. By evolution, exclusive contracts were deemed necessary to insure organized, cost effective, and efficient service throughout the County. In 1971, a "redistricting" of the franchise areas was passed by County Ordinance. The Ordinance created (7) distinct garbage collection areas or

transportation makes it a function likely to change more often than other solid waste management decisions.²²⁵ There are a number of options a local government can take with respect to this shifting area,²²⁶ but the best option may be to allow an appropriate level of discretion for the local administrator or legislative body.²²⁷

4. Additional Local Requirements

Although federal and state requirements place foundational limits on solid waste disposal, local governments can choose to impose additional obligations. Requirements such as set back obligations, limitations on storage and accumulation, and exemptions are among

corridors based on such factors as road and bridge infrastructure, proximity to landfill sites, etc. These franchise areas remain in effect today.

Id.

- 225. See, e.g., Solid Waste Digest, Solid Waste Industry News, at http://www.wasteinfo.com/news/transport.htm (last visited Nov. 5, 2003) (discussing changes in transportation at various solid waste operations nationwide).
- 226. One large municipality adopts ordinances for each approved hauler. See http://www.ci.houston.tx.us/departme/finance/franchise/swdfranchises.pdf (last visited Nov. 5, 2003).
- 227. For example, in Spartanburg County, South Carolina, the county solid waste management division issues collector's licenses to all private collectors collecting or transporting refuse within the county. Spartanburg County, S.C. Ord. No. 173, § 66-3. See also Sherburne County, Minn. Solid Waste Management Ordinance, § 7, available at http://www.co.sherburne.mn.us/zoning/solidwaste/documents/SWOrdinance/Section7.pdf (last visited Nov. 5, 2003) (setting forth licensing requirements for Sherburne County, Minnesota); Chatham County, N.C. Solid Waste Management Ordinance, available at http://www.co.chatham.nc.us/Ordinances/SolidWasteOrdinance.html (last visited Nov. 5, 2003) (setting forth licensing requirements for Chatham County, North Carolina).
 - 228. See supra Parts I.A. and I.B.
- 229. See, e.g., Travis County, Takings Impact Assessment: Solid Waste Siting Ordinance, available at http://www.co.travis.tx.us/county_attorney/pdffiles/takings.pdf (last visited Nov. 5, 2003). As stated by that local government:

There is a clear nexus between the degree of impacts solid waste facilities have on certain "receptors" and the proximity of those receptors to the facilities. In other words, the closer the receptor to the facility, the more negative the impact in terms of exposure to pathogens, odors, noise, visual blight, etc. from the facility. The ordinance would advance its purposes by requiring that new solid waste facilities and expansion of existing solid waste facilities not take place unless they will be at specified minimum distances from certain receptors, which would be defined in terms of identifiable land uses and features, or otherwise mitigated impacts on those land uses or features.

Id.

- 230. See, e.g., Otter Tail County Solid Waste Ordinance, Section 6: Solid Waste Storage, available at http://www.co.ottertail.mn.us/solidwaste/SolidWasteOrdinance 20012.pdf (last visited Nov. 5, 2003).
- 231. Steele County Solid Waste Ordinance #27, available at http://www.co.steele.mn.us/ENVSERV/ord27.html (last visited Nov. 5, 2003).

the options that might be particularized for a local setting. The model ordinance in Part II demonstrates a few choices that local governments may want to consider.²³² The model ordinance also has a section deferring to additional local laws.²³³

5. Fees and Finances

Local governments have varying options when it comes to fees to be associated with transportation and disposal of solid waste.²³⁴ As stated by the National Conference of State Legislators:

Unfortunately, in many areas of the United States the public still perceives MSW management to be a *free* service. States and local governments must work effectively together to counter this perception; full costs of MSW management must be made visible to the public either through user fees or by specific identification of these services in tax bills. States and local governments must cooperate to establish full cost accounting systems (also known as business-based accounting) so that MSW management costs can be effectively communicated to the public. Using effective accounting and cost analysis tools will allow MSW managers to more efficiently provide this public service.²³⁵

Local governments must therefore make appropriate choices as to whether and how to assess user fees. As one state put it, "[e]conomic theory suggests that paying a direct cost for a service is an incentive to not use that service, or to use it less than one would without direct costs assessed.... User fees can be based on time, weight, or volume (e.g., per

^{232.} See, e.g., Part II, Model Ordinance Sections [VI], [VI] and [VII], infra.

^{233.} See Part II, Model Ordinance Section [XI], infra.

^{234.} Understanding exactly how much solid waste disposal costs is an important part of making an informed decision. For help performing such an analysis, see U.S. Environmental Protection Agency, *Full Cost Accounting*, *available at* http://www.epa.gov/epaoswer/non-hw/muncpl/fullcost/index.htm (last visited Nov. 5, 2003).

^{235.} National Conference of State Legislators, Solid Waste Management: A Legislators' Guide to Municipal Solid Waste Management, at http://www.ncsl.org/programs/esnr/swastbk.htm (last visited Nov. 5, 2003). "MSW" refers to municipal solid waste.

^{236.} For a list of user fee and financing options used in Colorado, see LBA Associates & Colorado Association for Recycling (CAFR), 2003 COLORADO SOLID WASTE SURVEY, available at http://www.cafr.org/pdf/SW-survey-summary.pdf (last visited Nov. 17, 2003). For examples of a local ordinance implementing user fees, see Town of Otis, Me., Solid Waste Management Control, User Fee And Recycling Ordinance, available at http://65.109.109.212/images/PDF/wasteuserfee.pdf (last visited Nov. 17, 2003); Warner, N.H. Solid Waste Ordinance, available at http://www.warner.nh.us/solid_waste_ordinance.htm (last visited Nov. 17, 2003).

week, per pound, or per gallon)."²³⁷ Specific fees can be built into the language of the ordinance, ²³⁸ or left to the discretion of the local governing body. ²³⁹

6. Special Wastes

Certain types of waste including tires,²⁴⁰ white goods such as old refrigerators and washing machines,²⁴¹ and bulky items,²⁴² may require special handling, or may be more expensive to address. Local governments must make fundamental decisions regarding these wastes based in part on actual local disposal options, and should incorporate such decisions into the language of the ordinance.²⁴³

^{237.} Michigan Department of Natural Resources, Sample Ordinance To Establish A Volume-Based User Fee For Solid Waste Disposal, *at* http://www.michigantownships.org/information_department/ordinances/ord_solidwaste.htm. (last visited Jan. 23, 2004).

^{238.} See, e.g., An Ordinance Of The Ventura County Board Of Supervisors Repealing And Enacting Provisions Of The Ventura County Ordinance Code Pertaining To The Regulation Of Solid Waste, § 4703-3, available at http://www.ventura.org/envhealth/programs/solid_waste/sword.htm (last visited Nov. 5, 2003).

^{239.} See, e.g., Leelanau County Solid Waste Ordinance, available at http://www.leelanau.cc/downloads/ordinance_428.pdf (last visited Nov. 17, 2003) ("The County Board of Commissioners will review the fee schedule at least annually, and adjust the fees to provide for the budgetary needs for implementation, administration, and enforcement of the Plan and this Ordinance. The fee schedule will be a separate document, attached to this Ordinance.").

^{240.} Kelly M. Brown et al., Scrap Tire Disposal: Three Principles for Policy Choice, 41 NAT. RESOURCES J. 9, 21 (2001) ("For a state's scrap tire management program to succeed, policy choices must necessarily rely on a detailed assessment of the markets for scrap tires and scrap tire products. The details of such an evaluation will vary tremendously across individual states, so one would expect state policies to vary significantly.").

^{241.} See, e.g., North Carolina Department of Environment and Natural Resources, Local Government Case Study: Davidson County—White Goods Program, available at http://www.p2pays.org/ref/26/25010.pdf (last visited Nov. 5, 2003).

^{242.} See, e.g., City of Portsmouth Ordains, Solid Waste, Yard Waste And Recycling, available at http://www.cityofportsmouth.com/publicworks/solidwasteordinace02.pdf (last visited Nov. 5, 2003).

^{243.} For examples of various approaches to special waste handling, see City Of Lewiston Code Of Ordinances, ch. 62, art. I, available at http://ci.lewiston.me.us/news/wasteordinancechanges.htm (last visited Nov. 17, 2003); Greater Upper Valley Solid Waste District Waste Management Ordinance, available at http://www.guvswd.org/stories/storyReader\$36 (last visited Nov. 17, 2003); and Cass County Solid Waste Ordinance, available at http://www.co.cass.mn.us/esd/pdfs/ordinance/SOLID.pdf (last visited Nov. 17, 2003).

7. Recycling

The process of recycling has become a big business:²⁴⁴ Decisions about recycling involve both public policy²⁴⁵ and economic realities.²⁴⁶ Local governments deciding to incorporate recycling into their solid waste management can run their own recycling programs, or contract with forprofit recycling companies.²⁴⁷

^{244.} See, e.g., National Recycling Coalition, available at http://www.nrc-recycle.org/aboutnrc/About.htm (last visited Nov. 5, 2003); Recycling Today, at http://www.recyclingtoday.com (last visited Nov. 5, 2003); Recycle America Alliance, Waste Management, Inc. Announces Formation of New Recycle America Alliance (Jan. 13, 2003), at http://www.recycleamericaalliance.com/Home.asp?content=press.asp (last visited Nov. 5, 2003).

See, e.g., City of Durham, N.C., An Ordinance Amending Chapter 10 of the Durham City Code By Including Revised Sections Regarding the Banning of Disposal of Transfer and the Use of Station, http://www.ci.durham.nc.us/departments/solid/pdf/ordinance.pdf (last visited Nov. 5, 2003) See also Memorandum to P. Lamont Ewell, City Manager, from Nancy L. Newell, Solid Waste Manager/Engineer, Resolution Setting the Penalty Fees for Violation of the Disposal Ban of Recyclables Ordinance, (Nov. 20, 1997) (authorizing fees, which were set at fifteen dollars per violation for residential and fifty dollars per violation for stationary container customers). An accompanying explanatory web site maintained by the Solid Waste Management division of the City of Durham, North Carolina notes that "in 1997 . . . the Durham City Council passed an ordinance which makes it unlawful for residents, businesses and industries to throw away . . . [s]teel cans, aluminum cans, glass bottles and jars, newspaper, and corrugated cardboard." Durham, N.C., Solid Waste Management Disposal Recyclables, Department: Α Ban on the of http://www.ci.durham.nc.us/departments/solid/wr_ban.cfm (last visited Nov. 5, 2003). See also Local Law No. 12, 1989, As Revised Pursuant To Section 6. Hereof A Local Law Onondaga County Source Separation Law, http://www.ocrra.org/recycling.htm (last visited Nov. 5, 2003) ("Operation Separation . . . is OCRRA's award-winning recycling program. Thanks to the people of Onondaga County, the community has a 95% participation rate and reduces the amount of trash it creates by more than 64%.").

^{246.} See, e.g., Bill O'Brien, GT County weighs new recycling plan, TRAVERSE CITY RECORD EAGLE (May 23, 2003), available at http://www.recordeagle.com/2003/may/23waste.htm (last visited Nov. 5, 2003) (proposing that a local government take over recycling from the company Waste Management); Council of the City of Phoenix, A Resolution Of The City Council Adopting Procedures For Procurement, Management And Use Of Recycled And Environmentally Sensitive Products, available at http://www.sustainable.doe.gov/codes/phoenix.shtml (last visited Nov. 5, 2003).

^{247.} Global Recycling Network, at http://grn.com/a/0125.html (last visited Nov. 5, 2003) (listing waste management companies).

8. Methods of Public Participation

Good governance typically includes citizens in local decision-making.²⁴⁸ Environmental justice concerns magnify this reality.²⁴⁹ Therefore, local laws dealing with solid waste disposal benefit from a strong public participation component.²⁵⁰

At the end of the day, local governments must adopt laws that work best for their areas. This subsection, and the section that follows (which presents model ordinance language for consideration), are only starting points for local discussion about the adequacy of existing local solid waste laws, and planning for the future of solid waste disposal in a particular locality.

II. MODEL LANGUAGE FOR A RURAL SOLID WASTE ORDINANCE

In light of the requirements and suggestions set forth in the previous section, this section presents model language for a local law governing solid waste disposal in rural areas. The proposed model language is set forth in italics. The model ordinance deals directly or indirectly with the following issues identified in the previous section: federal and state requirements; environmental justice and public participation; flow control; documentation and financing requirements; transportation, special wastes and additional local requirements; and recycling. Per the recommendation above, it is a broad and comprehensive ordinance. Explanations and matters for consideration are set forth in normal type. A specific ordinance must, of course, be conformed to local conditions, and be drafted with a full understanding of applicable state and other laws.²⁵¹

[TITLE]AN ORDINANCE REGULATING SOLID WASTE IN XXX [COUNTY]²⁵²

Drafters will need to determine an appropriate title, which may depend on ordinance title conventions in a particular locality.

^{248.} See Institute for Local Self Government, Core Values For The Practice Of Public Participation, available at http://www.ilsg.org/doc.asp?intParentID=2926 (last visited Nov. 17, 2003).

^{249.} See supra Part I.D.

^{250.} Allendale County, South Carolina, An Ordinance Regulating Solid Waste In Allendale County, on file with the author.

^{251.} See the Appendix for a list of state agencies and state laws that apply in each state.

^{252.} If a unit of local government is not a county, appropriate changes should be made throughout the document.

[TABLE OF CONTENTS]

A table of contents provides easy access to the law. If enacted as set forth below, the table of contents for the model ordinance would be:

Preface

Section [I]. Definitions

Section [II]. Applicability

Section [III]. Federal, State and Local Laws

Section [IV]. Solid Waste Management Facilities

Section [V]. Transportation and Disposal Activities

Section [VI]. Recycling

Section [VII]. Public Hearings

Section [VIII]. Hazardous, Infectious or Radioactive Waste

Section [IX]. Responsibility for Injuries to Persons or Vehicles

Section [X]. Enforcement

Section [XI]. Local Requirements

Section [XII]. Severability Clause

Section [XIII]. Effect

[Preface or Introduction]

There are different formats for introductory portions of an ordinance—some appear in a "whereas" format (Option 1), while others appear as an introductory paragraph or paragraphs (Option 2), or a more traditional legislative introductory format (Option 3). Formats should fit local custom.

OPTION 1: "Whereas" Format

WHEREAS, XXX [County], XXX has long recognized that a clean, safe, and attractive environment is important to the health, safety and welfare of all [County] inhabitants; and

[WHEREAS, the increasing landfill requirements and the diminishing number of sites available for landfills in the State of XXX and the XXX

Region of the United States make rural areas such as XXX [County] attractive locations for development of landfills; and]

WHEREAS, solid waste and landfills present potential hazards for human health and possible diminished quality of life; and

WHEREAS, efficient and proper solid waste management is essential for economic prosperity in XXX County; and

WHEREAS, waste stream reduction, recycling, and reuse are encouraged by XXX County; and

WHEREAS, [Reference state law] permits [Counties] to regulate the collection and disposal of solid waste; and

WHEREAS, [Reference state law] requires local governments to adequately plan for and provide efficient, environmentally acceptable, solid waste management services and programs [amend to conform to state law specifics and add reference to regional authorities and agreements, if applicable]; and

WHEREAS, XXX [County Council] considers it necessary to act in the interests of its residents, present and future;

NOW THEREFORE,

BE IT ORDAINED BY THE XXX [COUNTY COUNCIL]:

OPTION 2: Introductory Paragraph

This ordinance is drafted in the interest of residents, present and future, of XXX [County], XXX, which has long recognized that a clean, safe, and attractive environment is important to the health, safety and welfare of all [County] inhabitants. [The increasing landfill requirements and the diminishing number of sites available for landfills in the State of XXX and the XXX Region of the United States make rural areas such as XXX [County] attractive locations for landfill development.] While efficient and proper solid waste management is essential for economic prosperity. solid waste and landfills present potential hazards for human health and possible diminished quality of life. [Reference state law] permits [Counties] to regulate the collection and disposal of solid waste and [reference state law] requires local governments to adequately plan for and provide efficient, environmentally acceptable solid waste management services and programs [amend to conform to state law specifics and add reference to regional authorities and agreements if applicable]. ordinance governs all activities associated with solid waste in XXX [County], XXX.

OPTION 3: Traditional Legislative Introductory Paragraph

An ordinance authorizing and providing for [County] solid waste management; establishing powers and duties in connection therewith; establishing standards and requirements for the transportation and disposal of solid waste generated within the [County]; [requiring a license for the transportation and disposal of solid waste of XXX [County]]; providing for the enforcement of these requirements; and imposing penalties for failure to comply with these provisions; in purpose and object to promote the health, welfare and safety of the public and protect resources of water, air and land pursuant to [reference state law].

Section [I]. Definitions.

The listed definitions cover words in subsequent sections that would benefit from a formal definition. Modifications to sections of the model ordinance may require changes to this section.

Any term not specifically defined in this section shall be construed pursuant to its plain and ordinary meaning. The word "shall" is always mandatory and not merely discretionary.

- (A) "Burn Drum" A container in which solid waste is burned.
- (B) "Construct" or "Construction" -
 - 1) Any physical modification to the site at which a potential or proposed solid waste management facility is or will be located, including, but not limited to: site preparation; clearing; grading; excavation; construction, renovation, or expansion of buildings or other structures; installation of liners; increase in capacity or disposal rate; or the purchase of additional property that may be utilized for solid waste management; or
 - 2) Any activity at a site where a potential or proposed solid waste management facility is or will be located that requires permission from the [County]; or
 - Any change in ownership of any existing or proposed solid waste management facility.
- (C) "Construction and Demolition Debris" Used or discarded solid waste resulting from construction, remodeling, repair, and/or demolition of pavements, houses, commercial buildings, or other structures. Construction and demolition debris includes, but is not limited to, bricks, concrete, and other masonry materials, lumber, road spoils, and paving materials, but does not include solid waste from agricultural operations.
- (D) "Composting Facility" Any facility used to provide aerobic, thermophilic decomposition of certain solid organic constituents of solid waste to produce a stable, humus-like material, but does not include confined animal feeding operations. Solid organic constituents shall not include sewage sludge.

- (E) "Convenience Center" Any [County]-authorized site designated for the collection of solid waste, including residential garbage, yard waste, bulky items, waste oil, or recyclables.
- (F) ["County"] XXX County, XXX [State]
- (G) ["County Council"] The XXX [County Council] and in limited circumstances, its designated agent.
- (H) "XXX" The [state office in charge of solid waste matters. See Appendix B]
- (I) "Dispose or Disposal" The discharge, deposition, injection, dumping, spilling, or placing of any solid waste into or on any land or water.
- (J) "Financial Responsibility Mechanism" A mechanism designed to demonstrate that sufficient funds are available at the outset of operation to meet closure, post-closure, and corrective action expenses. Approved mechanisms include insurance, trust funds, surety bonds, personal bonds, and certificates of deposit.
- (K) ["Green Box" A County-provided collection bin for residentiallygenerated solid waste.]
- (L) "Industrial Solid Waste Management Facility" A solid waste management facility for the disposal of solid waste or special waste generated by persons who own or operate the landfill.
- (M) "Land Clearing Debris" Trees, stumps and associated vegetation and soil resulting from land clearing activities.
- (N) "Landfill" A disposal facility or part of a facility where solid waste is placed in or on land.
- (O) "Commercial Solid Waste Management Facility" A solid waste management facility that profits from the disposal of solid waste or special waste generated by persons who do not own or operate the facility.
- (P) "Person" An individual, corporation, company, association, partnership, unit of local government, state agency, federal agency, or other legal entity.
- (Q) "Public Interest" Choosing the best option for the health, safety, and welfare of the citizens of XXX [County].
- (R) "Recycling" The process of collecting, sorting, cleansing, treating, and/or reconstituting materials that would otherwise become solid waste for the purpose of using the altered form in the manufacture of new, reused or reconstituted products. Recycling does not include burning, incinerating, or thermally destroying solid waste.
- (S) "Secure" To take all necessary steps, such as using bags, tarps, ropes, or other means, to ensure that no solid waste falls or blows off any vehicle used to transport solid waste.
- (T) "Solid Waste" Any garbage, refuse, or sludge from a waste treatment facility, water supply plant, or air pollution control facility, including

- solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations as well as from community and residential activities. [Reference state law or local agreements, if applicable]
- (U) "Solid Waste Management Facility" Any solid waste landfill or other facility, including but not limited to, Commercial and Industrial Solid Waste Management Facilities, the purpose of which is the storage, collection, transportation, treatment, use, processing, recycling, or disposal, or any combination thereof, of solid waste.
- (V) "Special Waste" Any nonresidential or commercial solid waste that requires special handling, including but not limited to: pesticide wastes, liquid wastes, sludges, industrial process wastes, wastes from pollution control processes, residue or debris from the cleanup or spillage of chemical substances, contaminated soil or waste materials, bulky materials, stringy materials, containers, and drums. [Reference state law or local agreements, if applicable]
- (W) "Tipping Fee" Monetary charge levied per ton for the disposal of garbage, yard waste, or other types of waste.
- (X) "Transfer Station" A facility that allows for the unloading of solid waste so that it can be put in large vehicles or containers and transported to another appropriate location.
- (Y) "Tire Dealer" A person engaged in the business of selling new or used tires, either retail or wholesale, or manufacturing tires.
- (Z) "White Goods" All major household appliances, such as stoves, refrigerators, hot water heaters, washers, dryers, and dishwashers. White goods do not include electronic equipment such as televisions, stereo equipment, microwave ovens, or computer equipment.

Section [II]. Applicability.

- (A) This ordinance regulates storage, collection, transportation, transfer, treatment, use, processing, recycling, or disposal, or any combination thereof, of solid waste in the [County]. This ordinance regulates fees related thereto and the enforcement of state and local laws, regulations and standards that are or may become applicable.
- (B) No owner, occupant, tenant, or lessee of any property in [the County] shall deposit, store, or permit to accumulate any solid waste upon his or her property that is not stored or disposed of in a manner prescribed by this ordinance. No solid waste shall be collected or transported in the [County] in a manner not prescribed by this ordinance. Actions described in Section II(A) shall be undertaken in a manner consistent with this ordinance.
- (C) The following uses are exempt from the requirements of this ordinance:
 1) Land clearing debris generated and disposed of on-site.

- 2) Composting facilities.
- 3) Shredding or chipping of untreated wooden pallets or other wooden packaging materials that have not been in contact with hazardous compounds, e.g., petroleum products, pesticides, lead-based paint, etc.
- 4) Land application sites governed by [reference state law]

Section [III]. Federal, State and Local Laws.

All valid local, state and federal laws apply to activities in your local area regardless of inclusion of a section such as this.²⁵³ The purpose of this section is not to make such laws applicable, but to help remind persons dealing with solid waste that many other laws apply to activities in a local area. Option 1 makes a blanket statement regarding applicable law. Option 2 provides ordinance drafters with the opportunity to set forth a list of laws that might apply.

OPTION 1

All solid waste management facilities shall adhere to all federal and state laws and regulations, all local zoning, land use and other applicable local ordinances, and other governing contracts or agreements.

OPTION 2

- (A) All solid waste management facilities shall adhere to all federal and state laws and regulations, and any and all local zoning, land use and other applicable local ordinances. These laws and regulations include, but are not limited to:
 - 1) [List applicable local ordinances];
 - 2) [List applicable state law(s) and, possibly, regulations];
 - 3) Federal Water Pollution Control Act (Clean Water Act), 33 U.S.C. §§ 1251 to 1387;
 - 4) Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 to 6992k;
 - 5) Endangered Species Act, 16 U.S.C. §§ 1531 to 1544;
 - 6) Clean Air Act, 42 U.S.C. §§ 7401 to 7642;
 - 7) Safe Drinking Water Act, 42 U.S.C. §§ 300f to 300j-26;
 - 8) [Other laws appropriate to the locality]
- (B) All persons doing business in the [County] shall adhere to all applicable requirements of [reference regional agreements or other contractual or general agreements if applicable].

^{253.} See supra Parts I.A. and I.B.

Section [IV]. Solid Waste Management Facilities.

This section will need to be adjusted to local practices for governing businesses and other relevant operations. Some local governments may issue formal permits or certifications, while others may simply issue letters indicating that permission is granted for particular undertakings.

(A) Application Procedures

- 1) Before initiating the construction of a solid waste management facility located or to be located within XXX [County], a person shall file [a permit application or an application for permission/certification] from the [County Council]. Such application shall include the following:
 - a) A non-refundable application fee of [\$XXX] [in the form of certified check] to cover expenses to be incurred in reviewing the application for compliance with this ordinance, in conducting the public hearings required by this ordinance, in inspecting the construction for compliance with the approved plan, and other necessary activities. [If application processing expenses exceed \$XXX, the excess shall be billed to the applicant and [permission/certification] shall not be granted until that expense is paid in full.];
 - b) A detailed description and site plan depicting the proposed or existing location of the solid waste management facility, including all available dimensions, specifications, blueprints, etc.;
 - c) Description of the approximate annual tonnage of solid waste and types of solid waste expected by the solid waste management facility;
 - d) The name(s), address(es), phone number(s) and professional affiliations of:
 - the person(s) who own(s) or will own the solid waste management facility;
 - ii) the person(s) who operate(s) or will operate the solid waste management facility:
 - iii) in the case of a facility to be built, the person(s) who will design and construct the solid waste management facility;
 - e) A description (substantially complying with the relevant requirements of [cite state law and any regulations promulgated thereunder]) indicating the [County]'s need for the solid waste management facility and the project's consistency with [applicable regional and state plans];

f) [A description indicating the applicant's intended compliance with applicable local ordinances];

The reports called for in subsections (g) through (j) below may substantially duplicate requirements with which the applicant must comply on a federal or state level; therefore, in some cases it may be appropriate to omit them and/or request copies of all relevant state or federal submissions.²⁵⁴

- g) [A complete hydrological and geological report by a registered geologist, together with a detailed statement of the geologist's credentials, that includes such factors as flood plains, depth to water table, drainage plan, groundwater travel time, proximity to public water supply watersheds, soil pH, soil cation, exchange capacity, soil composition and permeability, cavernous bedrock, seismic activity, slope, and climate;]
- h) [A complete air quality report by an expert, together with a detailed statement of the expert's credentials, that sets forth relevant facts and circumstances bearing upon the reasonableness of the proposed activity and the proposed control methods, including an assessment of the practicability, both scientific and economic, of reducing or eliminating discharge resulting from the proposed Facility;]
- i) [At least one complete baseline water analysis test from a laboratory certified under the federal Safe Drinking Water Act,]
- j) [Copies of all documents generated in compliance with federal and state legal requirements; and]
- k) Any other reasonably available information [County Council] may request at any time in the application process.
- 2) Before [permission/certification] is granted or construction begins, the applicant must prove the existence of one or more financial responsibility mechanism(s) in an amount sufficient to fund all maintenance, closure activities, and post-closure activities, including possible corrective action, of any solid waste management facility. The amount of the financial responsibility mechanism(s) shall be set based on recommendations from an independent expert, who shall submit a report to the [County] together with a detailed statement of the expert's credentials. In generating recommendations, the expert shall take into account:
 - a) all projected costs, assuming activities connected with the solid waste management facility develop as planned;

^{254.} See supra Part I.F.2.

- b) all projected costs, assuming activities connected with the solid waste management facility develop in an unanticipated and negative manner; and
- c) all interest, fines, and other charges likely to accrue.
- d) A solid waste management facility located or to be located within the [County] shall consent to the inspection by [County] representatives of any current facility and/or review of any documents that relate to the environmental compliance history of any facility the permit applicant owns and/or operates.
- e) A solid waste management facility shall be constructed at least [specify distance based on local conditions and zoning standards] from any occupied residence, church, cemetery, public or private building, or public-use land. [County Council] reserves the right to increase or decrease this general requirement consistent with the public interest and factors such as typical wind direction, topography, geography, proximity to other pollutant sources, and other appropriate matters.
- f) A solid waste management facility shall adjoin a right-of-way from an existing state highway or [County] road. The applicant shall have appropriate approval granting access to the facility.
- 6) The application shall be subject to the public hearing requirement pursuant to Section [VII].
- 7) The full application, including all attachments and reports, shall be available for inspection by all interested parties prior to any public hearing.
- 8) In reviewing the request to construct the solid waste management facility, the [County Council] shall consider the following:
 - a) Acceptability within the community;
 - b) Hydrological and geological factors such as flood plains, depth to water table, groundwater travel time, proximity to public water supply, watersheds, soil pH, soil cation exchange capacity, and composition;
 - c) Natural resources such as wetlands, endangered species habitats; proximity to parks, forests, wilderness areas, and historical sites; and air quality;
 - d) Local land use whether residential, industrial, commercial, recreational, agricultural, and proximity to incompatible structures such as schools, churches, and airports;
 - e) Transportation factors, such as proximity to population, route safety, method of transportation, and proximity to other waste generators;
 - f) Aesthetic factors such as visibility, appearance and noise level; and

- g) Experience and management qualifications.
- 9) After [County Council] has reviewed the request to construct the solid waste management facility, [County Council] may, by [majority] vote:
 - a) Grant permission for the requested construction; or
 - b) Grant permission for the requested construction with modification or conditions;
 - c) Deny permission for the requested construction. Such denial must be based on rational grounds, which might include, but are not limited to: [a determination that the proposed construction would not be consistent with local ordinances (including local zoning and land use ordinances)]; a determination that the proposed construction is not needed to handle the solid waste needs of the [County]; a determination that the considerations in [(A)(8)] or the findings in [(A)(11)] do not warrant approval; and/or a determination that the proposed construction is not in the public interest.
- 10) [County Council] shall make its decision under Section [(A)(9)] within 180 days of the last public hearing as required pursuant to Section [].
- 11) [County Council] shall base the issuance of permission under Section [IV(A)(9)(a) or (b)] on the following findings:
 - a) That the proposed solid waste management facility is capable of appropriate management in the [County] and serves the interest of [County] citizens as a whole;
 - b) That local citizens, elected officials and other stakeholders have had adequate opportunity to participate in the approval process.
 - c) That the proposed construction and operation of the solid waste management facility will not pose an unreasonable health or environmental risk to the surrounding location; and
 - d) That the applicant has taken or consented to take any reasonable measures to avoid or manage foreseeable risks and to comply to the maximum feasible extent with all applicable laws and ordinances.
- 12) Any party in interest may appeal a decision of the [County Council] concerning the proposed construction of the solid waste management facility to the [Circuit Court], provided a proper petition is filed with the XXX [Clerk of Court] within 30 days of the date of such decision. An appeal shall cease all staff and review agency activity regarding the project until the [Circuit Court] decision is rendered.

- 1) The [County Council] or its designated agent has the right to inspect any solid waste management facility within the [County] at reasonable times during regular business hours to ensure compliance with this ordinance and all applicable laws.
- 2) Any solid waste management facility shall produce upon request by the [County] any documents related to environmental compliance history at any facility owned and/or operated by the person owning or operating that facility.
- 3) Any solid waste management facility shall maintain regular hours of operation, which shall not begin prior to [XX:XX a.m.] local time and shall not extend beyond [XX:XX p.m.] local time. Such hours may be modified for a particular solid waste management facility with approval in writing from the [County].
- 4) The [County] reserves the right to revoke permission to construct or operate, after due notice and opportunity for a hearing, if the solid waste management facility violates any section of this ordinance or any provision associated with [County] permission, or violates other applicable laws, or is otherwise deemed not to be in the public interest.

Section [V]. Transportation and Disposal Activities.

This section might begin with a reference to the existing landfill(s) used by the relevant local government, and existing agreements with respect to solid waste disposal.

- (A) Residential, commercial, and industrial facilities may contract directly with private waste haulers who in turn may dispose of solid waste within the XXX [County] landfill(s).
- (B) XXX [County] or its designated agents retain authority to transport solid waste to or dispose of solid waste in the XXX landfill(s).
- (C) Tipping fees: All solid waste disposed of at XXX landfill(s) shall be assessed an amount per ton to be determined annually or as necessary by [County Council].
- [(D) OPTION: Local governments may want to develop different tipping fees for transfer stations.]
- (E) Convenience Centers and Green Boxes
 - 1) Convenience centers' and green boxes are maintained by XXX [County] for disposal of solid waste by [County] residents only.
 - 2) All solid waste deposited at convenience centers must be:
 a) placed inside a provided container and not on the ground; and
 b) bagged in order to avoid wind-blown litter and leaking liquids.
 - 3) None of the following wastes may be disposed of at the convenience centers or green boxes:

- a) Special wastes;
- b) Land clearing debris;
- c) Construction and demolition debris, except for de minimus quantities of debris associated with small residential projects by homeowners or renters;
- d) Burn Drums; and
- e) Materials listed in Section VIII.
- 4) [White goods and miscellaneous scrap metal shall be disposed of at convenience centers only, consistent with [reference local agreements or state law, if applicable]. All white goods presented for disposal must have empty Freon containers.]
- 5) Tires must be taken to convenience centers where they will be disposed of by the [County]. A person may dispose of no more than XXX tires per day at the convenience centers. Tire dealers are prohibited from disposing of tires at the convenience centers. Except for tire dealers, no more than XXX tires can be in a single location on public or private property in XXX [County] for a period of more than [one week].
- (F) All vehicles used to collect and haul solid waste or recyclable materials in XXX [County] must meet the standard for solid waste hauling established by [reference state agency if appropriate. If not, expand description of requirements for such vehicles].
- (G) At all times during transport and otherwise, solid waste shall be secured in order to avoid wind-blown litter and leakage of liquids.
- (H) Hauling Licensors.
 - 1) Only waste haulers with [County approvals/permits/licenses] shall engage in the business of collecting, transporting, delivering, or disposing of solid waste generated by another person for profit when the source of the solid waste is within the jurisdiction of this Ordinance.
 - 2) Waste haulers shall make written application to the [County] [on forms provided or prescribed by the County] that enables the [County] to determine whether the applicant, if [approved/permitted/licensed], will serve the public in compliance with requirements of the Ordinance, and all other applicable laws, statutes, ordinances, rules, and regulations. Such approval will be issued within [30 days] of receipt of application.
 - 3) [Annual] application or renewal fees must be paid by the waste haulers at a rate to be determined [annually] by the [County].
 - 4) An [approval/permit/license] issued under this Section shall not be transferable.

5) An [approval/permit/license] issued under this Section shall expire on the first day of January of the following year. Licenses may be renewed annually following the procedures set forth above.

Section [VI]. Recycling.

- (A) The following recyclables may be accepted at [convenience centers, transfer stations, or other locations deemed appropriate by local government] in the area designated:
 - 1) [Newspapers];
 - 2) [Mixed paper];
 - 3) [Glass];
 - 4) [Aluminum];
 - 5) [Other metals];
 - 6) [Plastics];
 - 7) [Cardboard];
 - 8) [Motor oil]; and
 - 9) [Other such materials as may be approved for recycling by XXX [County]].
- (B) Recycling containers shall not be used to deposit non-recyclable solid waste.

Section [VII]. Public Hearings.

- (A) The [County Council] shall schedule at least [three] public hearings to receive public comment regarding:
 - 1) Any application for the construction of a solid waste management facility, or
 - 2) Any other significant decision that will impact solid waste matters in XXX [County].
- (B) XXX [County] shall not grant permission for construction or proceed with any other significant decision that will impact solid waste matters in XXX [County] until all required public hearings have been held. If the hearing is with respect to a solid waste management facility, public hearings shall not be held until an application is deemed complete by the [County].
- (C) Notices of public hearings shall be:
 - 1) Published at least twice in one newspaper of general circulation in XXX [County];
 - 2) Posted in at least [five] prominent places in XXX [County], at least fifteen days before such hearing; and
 - 3) [At the discretion of the [County Administrator/Executive or Mayor or other appropriate person], posted on the [County] web site http://XXX, at least fifteen days before such hearing.]

- (D) XXX [County] shall mail copies of the public hearing notice at least fifteen days before such hearing to the property owners of all property [OPTION 1: within the [County]; OPTION 2: within [XXX miles] from the boundary of the existing or proposed solid waste management facility. The County may mail copies of the public hearing notice to all county residents if the County Council deems it in the public interest.] Notice shall be addressed to property owners as their names appear on [the latest completed assessment roll] for XXX [County].
- (E) The public hearing notice shall contain all relevant information, including, but not limited to, all applicable items below:
 - 1) How long the solid waste management facility is expected to operate;
 - 2) Approximate tonnage of solid waste the solid waste management facility is expected to handle per year;
 - 3) Types of solid waste the solid waste management facility will handle, with examples set forth for each type;
 - 4) Primary transportation route for solid waste; and
 - 5) Geographic area the solid waste management facility will serve.
- (F) [The applicant shall pay for the County's costs to mail public hearing notices.]
- (G) One public hearing may be held during regular business hours.
- (H) At least two public hearings shall be held during evening hours.
- (I) Any interested person may appear and present comment at a public hearing or submit written material for [County Council] review and consideration.
- (J) XXX [County] shall create a complete transcript of the hearing comments and make that transcript available to the public.

Section [VIII]. Hazardous, Infectious or Radioactive Waste.

As is true of the "Federal, State and Local Laws" section above, all local, state and federal laws apply to activities in a local area regardless of inclusion of a section such as this. Some local governments may nevertheless want to include language such as that set forth in this section to emphasize the limitations on such waste disposal.

It is unlawful for any person to dispose of the following wastes in XXX [County]:

- 1) Hazardous waste regulated under [reference state and possibly federal law];
- 2) Infectious waste regulated under [reference state and possibly federal law]; or
- 3) Radioactive waste regulated under [reference state and possible federal law].

Section [IX]. Responsibility for Injuries to Persons or Vehicles.

The [County] shall not be responsible for injuries to a person while hauling refuse to a disposal area or while on a disposal area premises, if those injuries are caused by the person's own negligence. The [County] shall not be liable for damage to vehicles caused by the driver's negligence.

Section [X]. Enforcement.

- (A) If any solid waste management facility is operated, constructed, modified, or expanded in violation of this ordinance, the [County Council], [County Attorney,] or any aggrieved person, may, in addition to other remedies provided by law, institute an injunction, abatement, or any other appropriate action or proceeding to prevent, enjoin, abate, or remove such unlawful construction, modification, or expansion.
- (B) Any person violating this ordinance, [except for Section __], and pursuant to [reference state law if applicable] shall be deemed guilty of [a misdemeanor], and upon conviction shall be fined not more than [\$XXX] or imprisoned not more than [XXX]. Some state laws may place limits on these amounts or categories.²⁵⁵
- (C) Each day of noncompliance with this ordinance or noncompliance with a permit, regulation, standard, order, or other requirement constitutes a separate offense.
- (D) [XXX [County] law enforcement, including but not limited to [list officers, such as Sheriff, Deputies, Litter Control Officer(s), etc.] shall have the authority and duty to enforce this ordinance according to the penalty provisions in the preceding subsections.]

Section [XI]. Local Requirements.

If towns or municipalities within a larger local governmental unit have their own local laws, a decision will need to be made with respect to local requirements. Generally, local requirements should be enforced.

If a local requirement is more restrictive than any requirement found in this ordinance, the local requirement shall supersede the [County] requirement.

Section [XII]. Severability Clause.

The sections and subsections of this ordinance are severable. If any section, clause, sentence, part or provision therof is held illegal, invalid, or unconstitutional by any court of competent jurisdiction, such decision of

²⁵⁵ See, e.g., S.C. Code Ann. 1976 § 44-55-1060 (2003) (limiting violations of Article II, Garbage Collection and Disposal in Counties, to fines of one hundred dollars per day or imprisonment for up to thirty days).

the court shall not affect or invalidate any of the remaining sections or subsections of this ordinance.

Section [XIII]. Effect.

This ordinance shall be effective [OPTION 1: immediately upon the third reading; OPTION 2: specify a date.] [This ordinance supercedes/does not supercede XXX Ordinance Number(s) XXX.]

III. CONCLUSION

American citizens are expected to continue or increase their current rate of solid waste production, currently four and a half pounds per person per day. Local governments likely will continue their front-line role in the disposal of solid waste. Furthermore, local governments are likely to continue to face shortfalls in permitted landfill capacities, rising solid waste disposal costs resulting in part from more stringent federal and state environmental protection requirements, and increasing public attention to solid waste disposal matters. According to the National Conference of State Legislators, "[s]tate and local government budget pressures require that [local solid waste] management be as efficient and cost-effective as possible, while providing the greatest degree of public and environmental protection."

^{256.} U.S. Environmental Protection Agency, *Municipal Solid Waste in the United States: 2000 Facts and Figures*, EPA530-R-02-001 (June 2002) Executive Summary, *available at* http://www.epa.gov/epaoswer/non-hw/muncpl/report-00/report-00.pdf (last visited Nov. 5, 2003).

^{257.} See supra notes 8-11 and accompanying text.

^{258.} See supra note 173.

^{259.} See generally James Walsh, More on Sanitary Landfill Costs, WASTE AGE, Apr. 1990, at 289-91 (citing operating costs, closure costs, and post closure costs that are required in accordance with RCRA); Geoffrey F. Segal & Adrian T. Moore, Privatizing Landfills: Market Solutions for Solid-waste Disposal, Reason Public Policy Institute (May 2000), at http://www.rppi.org/privatization/ps267.html (last visited Nov. 5, 2003) (citing an increase in landfill costs due to Congress' and EPA's establishment of "environmentally acceptable practices for waste-disposal sites (landfills) across the nation").

^{260.} James W. Garthe and Jennifer L. Shufran, Farm Dumps: Problems and Solutions, Penn. State, College of Agricultural Sciences (1997), available at http://www.abe.psu.edu/extension/factsheets/c/C28.pdf (last visited Nov. 5, 2003); Eugene Golub, Angelo Perna, and Hsin Neng Hsieh, National Science Foundation and Gateway Coalition, Siting a Municipal Landfill in a Residential Community (March 1996), at http://129.25.62.195/curriculum_development_implementation/files/Gateway.doc (last visited Nov. 5, 2003).

^{261.} Deb Starket & Kelly Hill, National Conference of State Legislators, Executive Summary, Solid Waste Management: A Legislators' Guide to Municipal Solid Waste Management (1996), at http://www.ncsl.org/programs/esnr/swastbk.htm (last visited Nov. 5, 2003).

Thus, state and local governments are left with the daunting task of developing cost-effective local solid waste legislation.

Determining the scope and structure of local solid waste legislation is an extensive process. As demonstrated above, solid waste disposal is governed by requirements under the Federal Solid Waste Disposal Act of 1965 and applicable state laws, 262 together with additional federal requirements, 263 environmental justice concerns, 264 and local "flow control" limits. 265

While local governments can contract out some or all of their solid waste operations, they can never contract out their accountability to the public. Solid waste management is first and foremost strongly grounded in the need to protect public health, safeguard the environment and conserve and recover material and energy resources.²⁶⁶

Yet the development of local solid waste law need not be overwhelming. First, there are governmental programs that can help: EPA provides general information regarding solid waste management, 267 and the U.S. Department of Agriculture's Rural Utility Service also provides information and assistance. 268 Other private organizations may be able to help local governments consider methods and laws to deal with solid waste, including: Local Government Environmental Assistance Network, 269 the Air and Waste Management Association, 270 International

See supra Parts I.A. and I.B.

^{263.} See supra Part I.C.

^{264.} See supra Part I.D.

^{265.} See supra Part I.E.

^{266.} Solid Waste Association of North America (SWANA), at http://www.swanava.org (last visited Nov. 5, 2003).

^{267.} For example, EPA has available a free CD-Rom with basic information about for solid waste management. For ordering information, http://www.epa.gov/epaoswer/osw/cdoswpub.htm (last visited Nov. 5, 2003). See also U.S. ENVIRONMENTAL PROTECTION AGENCY, CATALOG OF HAZARDOUS AND SOLID **PUBLICATIONS** (16th ed. 2002), available at http://www.epa.gov/ WASTE epaoswer/osw/cat16.pdf.

^{268.} United States Department of Agriculture, Rural Utilities Service, at http://www.usda.gov/rus (last visited Nov. 5, 2003).

^{269.} The International City/County Management Association (ICMA), Local Government Environmental Assistance Network (LGEAN), at http://www.lgean.org/ html/about.cfm (last visited Nov. 5, 2003). The LGEAN considers itself a:

[&]quot;first-stop shop" providing environmental management, planning, funding, and regulatory information for local government elected and appointed officials, managers and staff. Located at http://www.lgean.org, LGEAN enables local officials to interact with their peers and others online. In an effort to reach all local governments, LGEAN also manages a toll-free telephone service (877/865-4326).

Municipal Lawyers Association,²⁷¹ Pace University's Municipal Law Resource Center,²⁷² the National Association of Counties,²⁷³ the National League of Cities,²⁷⁴ the United States Government's Firstgov.gov site,²⁷⁵ EPA's Environmental Planning for Small Communities Program,²⁷⁶ American Public Works Association,²⁷⁷ the National Association of Towns and Townships,²⁷⁸ the National Center for Small Communities,²⁷⁹

- 270. Air and Waste Management Association, at http://www.awma.org/about/overview.htm (last visited Nov. 5, 2003) ("The Association's goals are to strengthen the environmental profession, expand scientific and technological responses to environmental concerns, and assist professionals in critical environmental decision making to benefit society.").
- 271. International Municipal Lawyers Association, at http://www.imla.org/about/ History.htm (last visited Nov. 5, 2003) ("Owned solely by its members, IMLA is the legal voice for the nation's local governments. It champions the development of fair and realistic legal solutions and provides its members with information about, and solutions to, the profusion of legal issues facing its membership today.").
- 272. Pace University, Edwin G. Michaelian Municipal Law Resource Center, at http://appserv.pace.edu/execute/page.cfm?doc_id=3314 (last visited Nov. 5, 2003).
- 273. National Association of Counties, at http://www.naco.org/Template.cfm? Section=About_NACo (last visited Nov. 5, 2003) ("The association acts as a liaison with other levels of government, works to improve public understanding of counties, serves as a national advocate for counties and provides them with resources to help them find innovative methods to meet the challenges they face.").
- 274. The National League of Cities, at http://www.nlc.org/nlc_org/site/membership/ (last visited Nov. 5, 2003) ("The National League of Cities (NLC) represents 49 state municipal leagues and approximately 1,800 member cities, towns, and villages of all sizes in every state. Through the member state municipal leagues, NLC also represents 18,000 municipalities.").
- 275. FirstGov.gov, The U.S. Government's Official Web Portal, State and Local Employees: Resources for State and Local Government Employees, at http://www.firstgov.gov/Government/State_Local.shtml (last visited Nov. 5, 2003).
- 276. U.S. Environmental Protection Agency, *Environmental Planning for Small Communities (TRILOGY)*, at http://www.epa.gov/seahome/trilogy.html (last updated July 8, 2003).
- 277. American Public Works Association, at http://www.apwa.net (last visited Nov. 5, 2003). For matters specifically related to solid waste disposal, see http://www.apwa.net/ResourceCenter/index.asp?Section=solidwas&SectionName=Solid+Waste (last visited Nov. 5, 2003).
- 278. National Association of Towns and Townships, at http://www.natat.org/natat/introtext.htm (last visited Nov. 5, 2003) ("The purpose of the National Association of Towns and Townships (NATaT) is to strengthen the effectiveness of town and township government. NATaT does this by educating lawmakers and public policy officials about how small town governments operate and by advocating policies on their behalf in Washington, D.C.").
- 279. National Center for Small Communities, at http://www.natat.org/ncsc (last visited Nov. 5, 2003) ("The Center envisions a future where elected leaders of small communities have the skills and resources to: . . . expand local economies while preserving community character; protect local natural resources for future generations; and protect the health and welfare of their citizens.").

and the Rural Community Assistance Program.²⁸⁰ Certain states may have state-based organizations that can provide assistance as well, such as the Municipal Research and Services Center of Washington²⁸¹ and the Solid and Hazardous Waste Education Center at the University of Wisconsin.²⁸²

In considering the myriad options available for solid waste management, it is important to remember that local governments derive authority to adopt laws regulating solid waste from "land use enabling statutes, home rule laws, and special laws directly aimed at environmental protection." Because states differ in their approaches to such laws, the information in the Appendix should assist in determining what approach is best for a particular locality.

As the Second Circuit declared:

Not long ago, municipalities took out the trash simply by hauling it to the local dump. But as landfills have reached the bursting point, and as environmental regulations have burgeoned, local governments have been forced to make significant investments and become more innovative in safely and legally disposing of trash. These investments and innovations include the multifarious transfer stations, recycling centers, and incinerators that have mushroomed throughout the land in the past decade.²⁸⁴

In other words, the new transfer station that used to be my childhood dump in Truro, Massachusetts is not alone. Rural areas have begun, and

^{280.} Rural Community Assistance Program, Trash Talk, at http://www.rcap.org/about.html (last visited Nov. 5, 2003) ("RCAP staff are experienced community development and leadership trainers, management and financial system specialists, engineers, certified water and wastewater facility operators, environmental and solid waste program managers, rural housing experts, and health care providers. Many are fluent in a number of languages and dialects.").

^{281.} Municipal Research & Services Center of Washington, *Environment & Natural Resources*, at http://www.mrsc.org/center.aspx (last visited Nov. 5, 2003) (stating that the center's mission is "working together for excellence in local government through professional consultation, research and information services").

^{282.} University of Wisconsin, Solid and Hazardous Waste Education Center (SHWEC) at http://www1.uwex.edu/ces/shwec/ (last visited Nov. 5, 2003). SHWEC's mission is to "enhance Wisconsin's environment and economy by providing quality education, information and technical assistance to promote the sustainable use of natural resources." Id.

^{283.} John R. Nolon, In Praise of Parochialism: The Advent of Local Environmental Law, 26 HARV. ENVTL. L. REV. 365, 377 (2002). See generally DAVID C. MCCARTHY, JR. AND LAURIE REYNOLDS, LOCAL GOVERNMENT LAW IN A NUTSHELL, 1-63 (5th ed. 2003) (discussing the scope of local and state governing power and the derivation of local and state government power).

^{284.} SSC Corp. v. Town of Smithtown, 66 F.3d 502, 505 (2d Cir. 1995) (citations omitted).

will continue, to evolve and make the best solid waste disposal decisions they can for the health and safety of their residents. In many cases, enacting a comprehensive solid waste ordinance should be one of those decisions.

APPENDIX

STATE-BY-STATE GUIDE TO AGENCIES AND LAWS GOVERNING SOLID WASTE²⁸⁵

ALABAMA

Alabama Department of Environmental Management Land Division P.O. Box 301463

Montgomery, Alabama 36130-1463

(334) 271-7730

Web site: http://www.adem.state.al.us/landdivision/landdivisionpp.htm Relevant Code Sections:

Solid Wastes Disposal Act, ALA. CODE § 22-27-1 (1997).

ALASKA

Solid Waste Management Alaska Department of Environmental Conservation 410 Willoughby Avenue, Suite 303 Juneau, Alaska 99801-1795 (907) 465-5010

Web site: http://www.state.ak.us/dec/deh/sw/main/sw_index.html

Relevant Code Sections:

Water Pollution Control and Waste Disposal, ALASKA STAT. §§ 46.03.050 to 46.03.120 (Michie 2002).

Recycling and Reduction of Litter, ALASKA STAT. §§ 46.06.010 to 46.06.150 (Michie 2002).

^{285.} The following links may provide additional helpful information with respect to U.S. Environmental Protection Agency, States, at state solid waste programs. http://www.epa.gov/epaoswer/osw/stateweb.htm (last visited Nov. 5, 2003); NASCIO, Energy, Environment and Natural Resource Departments, at https://www.nascio.org (last and Local Government on the visited Nov. 2003); State http://www.statelocalgov.net/index.cfm (last visited Nov. 5, 2003). See also JEFFREY M. GABA AND DONALD W. STEVER, LAW OF SOLID WASTE, POLLUTION PREVENTION AND RECYCLING, App. A (West 2002) (providing detailed information, including some description of the relevant laws, although, as the authors of that work note, "regulations change frequently [and users] should in all cases check to see if there have been revisions").

ARIZONA

Arizona Department of Environmental Quality

1110 W. Washington Street

Phoenix, Arizona 85007-2935

(602) 771-2300

Web site: http://www.adeq.state.az.us/environ/waste/index.html

Relevant Code Sections:

Solid Waste Management, ARIZ. REV. STAT. ANN. §§ 49-701 to 49-791 (West 1997).

Management of Special Waste, ARIZ. REV. STAT. ANN. §§ 49-851 to 49-868 (West 1997 & West Supp. 2002).

Waste Tire Disposal Statutes, ARIZ. REV. STAT. ANN. §§ 44-1301 to 44-1307 (West 2003).

Sale and Disposal of Batteries, ARIZ. REV. STAT. ANN. §§ 44-1321 to 44-1324 (West 2003).

ARKANSAS

State of Arkansas Department of Environmental Quality

Solid Waste Management Division

P.O. Box 8913

Little Rock, Arkansas 72219-8913

(501) 682-0600

Web site: http://www.adeq.state.ar.us/solwaste/default.htm

Relevant Code Sections:

Arkansas Solid Waste Management Act, ARK. CODE ANN. §§ 8-6-201 to 8-6-222 (Michie 2000).

Solid Waste Management and Recycling Fund Act, ARK. CODE ANN. §§ 8-6-601 to 8-6-611 (Michie 2003).

Regional Solid Waste Management District and Boards, ARK. CODE ANN. §§ 8-6-701 to 8-6-724 (Michie 2000).

Disposal of Incinerator Ash and Petroleum-Contaminated Soils, ARK. CODE ANN. §§ 8-6-1201 to 8-6-1207 (Michie 2000).

Recycling, ARK. CODE ANN. §§ 8-9-101 to 8-9-506 (Michie 2000 & Supp. 2003).

CALIFORNIA

California Integrated Waste Management Board 1001 I Street

P.O. Box 4025

Sacramento, California 95812-4025

(916) 341-6000

Web site: http://www.ciwmb.ca.gov

Relevant Code Sections:

California Integrated Waste Management Act of 1989, CAL. PUB. RES. CODE §§ 40000 to 49620 (West 1996).

California Solid Waste Reuse and Recycling Access Act of 1991, CAL. PUB. RES. CODE §§ 42900 to 42912 (West 2002).

Solid Waste Disposal Site Cleanup and Maintenance, CAL. GOV'T CODE §§ 66799.10 to 66799.55 (West 2003).

COLORADO

Colorado Department of Public Health and Environment Hazardous Materials and Waste Management Division 4300 Cherry Creek Drive South Denver, Colorado 80246-1530 (888) 569-1831

Web site: http://www.cdphe.state.co.us/hm/hmgeninf.asp

Relevant Code Sections:

Solid Wastes Disposal Sites and Facilities, Colo. Rev. Stat. §§ 30-20-100.5 to 30-20-120 (2002).

CONNECTICUT

Connecticut Department of Environmental Protection Bureau of Waste Management 79 Elm Street Hartford, Connecticut 06106-5127 (860) 424-4023 Web site: http://dep.state.ct.us/wst/prgactiv.htm

Relevant Code Sections:

Solid Waste Management, CONN. GEN. STAT. §§ 22a-207, to 22a-256ee (West 1995).

DELAWARE

Delaware Department of Natural Resources and Environmental Control Division of Air and Waste Management Solid and Hazardous Waste 89 Kings Highway Dover, Delaware 19901 (302) 739-3689

Web site:http://www.dnrec.state.de.us/dnrec2000/divisions/awm/hw/indexsw.htm

Relevant Code Sections:

Environmental Control Statute, DEL. CODE ANN. tit. 7, §§ 6001 to 6009 (2001).

Solid Waste Authority, DEL. CODE ANN. tit. 7, §§ 6401 to 6460 (2001).

FLORIDA

Florida Department of Environmental Protection Bureau of Solid and Hazardous Waste 3900 Commonwealth Boulevard M.S. 49 Tallahassee, Florida 32399 (850) 245-2118

Web site: http://www.dep.state.fl.us/waste/categories/shw/default.htm Relevant Code Sections:

Resource Recovery and Management, FLA. STAT. ANN. §§ 403.702 to 403.7895 (West 2002).

GEORGIA

Georgia Environmental Protection Division Georgia Department of Natural Resources Land Protection Branch 4244 International Parkway, Suite 104 Atlanta, Georgia 30354 (404) 362-2537

Web site: http://www.dnr.state.ga.us/dnr/environ/aboutepd_files/branches_files/lpb.htm

Relevant Code Sections:

Georgia Comprehensive Solid Waste Management Act, GA. CODE ANN. §§ 12-8-20 to 12-8-40.3 (2001).

Regional Solid Waste Management Authorities Act, GA. CODE ANN. §§ 12-8-50 to 12-8-59.2 (2001).

HAWAII

Hawaii Department of Health Solid and Hazardous Waste Branch 919 Ala Moana Boulevard #212 Honolulu, Hawaii 96814 (808) 586-4226 Web site: http://www.state.hi.us/doh/eh/shwb/index.html

Relevant Code Sections:

Solid Waste Pollution, HAW. REV. STAT. ANN. §§ 342H-1 to 342H-57 (Michie 2000).

Lead Acid Battery, HAW. REV. STAT. ANN. §§ 342I-1 to 342I-9 (Michie 2000).

Integrated Solid Waste Management, HAW. REV. STAT. ANN. §§ 342G-1 to 342G-122 (Michie 2000 & Supp. 2002).

IDAHO

Idaho Department of Environmental Quality

Waste Management and Remediation

1410 N. Hilton

Boise, Idaho 83706

(208) 373-0502

Web site: http://www.deq.state.id.us/waste/waste1.htm

Relevant Code Sections:

Idaho Solid Waste Facilities Act, IDAHO CODE §§ 39-7401 to 39-7421 (Michie 2002).

Regional Solid Waste Disposal Districts, IDAHO CODE §§ 31-4901 to 31–4921 (Michie 1996 & Supp. 2003).

Solid Waste Disposal Sites, IDAHO CODE §§ 31-4401 to 31-4411 (Michie 2003).

Waste Tire Disposal, IDAHO CODE §§ 39-6501 to 39-6507 (Michie 2002 & Supp. 2003).

ILLINOIS

Illinois Environmental Protection Agency

Bureau of Land, Division of Land Pollution Control, Solid Waste Management

1021 North Grand Avenue East

P.O. Box 19276

Springfield, Illinois 62794-9276

(217) 785-8604

Web site: http://www.epa.state.il.us/land

Relevant Code Sections:

Land Pollution and Refuse Disposal, 415 ILL. COMP. STAT. ANN. 5/21 to 5/22.48 (West 1997 & Supp. 2003).

Illinois Solid Waste Management Act, 415 ILL. COMP. STAT. ANN. 20/1 to 20/8 (West 1997).

Degradable Plastic Act, 415 ILL. COMP. STAT. ANN. 80/1 to 80/5 (West 1997).

INDIANA

Indiana Department of Environmental Management Office of Land Quality P.O. Box 6015 Indianapolis, Indiana 46206-6015

(317) 232-8603

Web site: http://www.in.gov/idem/land/sw/solid.html

Relevant Code Sections:

Solid Waste Management, IND. CODE ANN. §§ 13-20-1-1 to 13-20-23-2 (Michie 2000 & Supp. 2002).

IOWA

Iowa Department of Natural Resources Land Quality and Waste Management Assistance Division 502 E. 9th Street, Wallace State Office Building Des Moines, Iowa 50319-0034 (515) 281-4367

Web site: http://www.state.ia.us/dnr/organiza/wmad/wmabureau/solidwaste/index.html

Relevant Code Sections:

Intergovernmental Solid Waste Services, IOWA CODE ANN. §§ 28G.1 to 28G.9 (2001).

Solid Waste, IOWA CODE ANN. §§ 455B.301 to 455B.316 (1997 & West Supp. 2003).

Waste Volume Reduction and Recycling, IOWA CODE ANN. § 455D.1 to 455D.19 (1997 & West Supp. 2003).

KANSAS

Kansas Department of Health and Environment Bureau of Waste Management 1000 SW Jackson Street, Suite 320 Topeka, Kansas 66612-1366 (785) 296-1600

Web site: http://www.kdhe.state.ks.us/waste

Relevant Code Sections:

Kansas Solid and Hazardous Waste, KAN. STAT. ANN. §§ 65-3401 to 66-3429 (1992).

KENTUCKY

Kentucky Department for Environmental Protection Kentucky Division of Waste Management 14 Reilly Road Frankfort, Kentucky 40601 (502) 564-6716

Web site: http://www.waste.ky.gov

Relevant Code Sections:

Solid Waste, Ky. REV. STAT. ANN. §§ 224.43-010 to 224.43-815 (Michie 2002).

Louisiana

Louisiana Department of Environmental Quality Office of Environmental Assessment P.O. Box 4314 Baton Rouge, Louisiana 70821-4314 (225) 219-3236

Web site: http://www.deq.state.la.us/organization/oea.htm

Relevant Code Sections:

Louisiana Solid Waste Management and Resource Recovery Law, LA.

REV. STAT. ANN. §§ 30:2151 to 30:2161 (West 2000).

Solid Waste Recycling and Reduction Law, LA. REV. STAT. ANN. §§ 30:2411 to 30:2423 (West 2000).

MAINE

Maine Department of Environmental Protection Division of Remediation and Waste Management 17 State House Station Augusta, Maine 04333-0017 (207) 287-7688

Web site: http://www.state.me.us/dep/rwm/index.htm

Relevant Code Sections:

Maine Hazardous Waste, Septage and Solid Waste Management Act, ME. REV. STAT. ANN. tit. 38, §§ 1301 to 1319-Y (West 2001).

MARYLAND

Maryland Department of the Environment Land Information, Solid Waste Management 1800 Washington Boulevard Baltimore, Maryland 21230 (800) 633-6101

Web site: http://www.mde.state.md.us/Programs/LandPrograms/Solid_

Waste/index.asp

Related Code Sections:

Water, Ice, and Sanitary Facilities, MD. CODE ANN., ENVIRONMENT. §§ 9- 101 to 9-1907 (1996).

MASSACHUSETTS

Massachusetts Department of Environmental Protection

Bureau of Waste Prevention

One Winter Street

Boston, Massachusetts 02108

(617) 556-1021

Web site: http://www.state.ma.us/dep/bwp/bwphome.htm

Relevant Code Sections:

Solid waste disposal facilities; maintenance and operation; applications for site assignment, MASS. GEN. LAWS ANN. ch. 111, § 150A (West 1996).

Criteria for Siting of Facilities, MASS. GEN. LAWS ch. 111, § 150A1/2 (2003).

Solid Waste Facilities, MASS. GEN. LAWS ANN. ch. 21H §§ 1 to 8 (West 2002).

MICHIGAN

Michigan Department of Environmental Quality

Waste and Hazardous Materials Division

P.O. Box 30241

Lansing, Michigan 48909

(517) 335-2690

Web site: http://www.michigan.gov/deq

Relevant Code Sections:

County Department of Solid Waste Management Act, MICH.

COMP. LAWS ANN. §§ 45.581 to 45.596 (1991).

MINNESOTA

Minnesota Pollution Control Agency

520 Lafavette Road

St. Paul, Minnesota 55155-4194

(800) 657-3864

Web site: http://www.pca.state.mn.us/waste/index.html

Relevant Code Sections:

Waste Management Act, MINN. STAT. §§ 115A.01 to 115A.991 (West 1997).

Pollution Control Agency, MINN. STAT. ANN. §§ 116.011 to 116.994 (1997 & West Supp. 2002).

MISSISSIPPI

Mississippi Department of Environmental Quality

Office of Pollution Control

P.O. Box 10385

Jackson, Mississippi 39289-0385

(601) 961-5171

Web site: http://www.deq.state.ms.us/newweb/homepages.nsf

Relevant Code Sections:

Mississippi Multimedia Pollution Prevention Act, Miss. CODE ANN. §§ 49-31-1 to 49-31-27 (1999).

Mississippi Solid Wastes Disposal Law of 1974, MISS. CODE ANN. §§ 17-17-1 to 17-17-507 (1999).

Missouri

Missouri Department of Natural Resources

Air and Land Protection Division, Solid Waste Management Program

P. O. Box 176

Jefferson City, Missouri 65102

(800) 361-4827

 ${\it Web~site}: http://www.dnr.state.mo.us/alpd/swmp/homeswmp.htm$

Relevant Code Sections:

Environmental Control, Mo. ANN. STAT. §§ 260.003 to 260.960 (West 2001).

MONTANA

Montana Department of Environmental Quality

Permitting and Compliance Division, Waste Management Section

1520 E. Sixth Avenue

P.O. Box 200901

Helena, Montana 59620

(406) 444-3490

Web site: http://www.deq.state.mt.us/pcd/csb/swms/wms/wms.asp

Relevant Code Sections:

Montana Solid Waste Management Act, MONT. CODE ANN. §§

75-10-201 to 75-10-233 (2001).

Montana Integrated Waste Management Act, MONT. CODE ANN. §§ 75-10-801 to 75-10-807 (2001).

Montana Megalandfill Siting Act, MONT. CODE ANN. §§ 75-10-901 to 75-10-954 (2001).

Infectious Waste Management Act, MONT. CODE ANN. §§ 75-10-1001 to 75-10-1006 (2001).

NEBRASKA

Nebraska Department of Environmental Quality **Integrated Waste Management Programs** 1200 "N" Street, Suite 400 P.O. Pox 98922 Lincoln, Nebraska 68509

(402) 471-2186

Web site: http://www.deg.state.ne.us

Relevant Code Sections:

Integrated Solid Waste Management Act, NEB. REV. STAT. §§ 13-2001 to 13-2043 (1996).

NEVADA

State of Nevada Department of Conservation and Natural Resources Division of Environmental Protection, Bureau of Waste Management 123 West Nye Lane, Room 120

Carson City, Nevada 89706-0851

(775) 687-4670

Web site: http://ndep.nv.gov/bwm/solid.htm

Relevant Code Sections:

State Regulations Governing the Collection and Disposal of Solid Waste, NEV. REV. STAT. ANN. §§ 444.440 to 444.620 (Michie 2000).

NEW HAMPSHIRE

New Hampshire Department of Environmental Services Waste Management Division, Solid Waste Management Bureau 6 Hazen Drive, P.O. Box 95 Concord, New Hampshire 03302-0095 (603) 271-2925

Web site: http://www.des.state.nh.us/sw

Relevant Code Sections:

Solid Waste Management, N.H. REV. STAT. ANN §§ 149-M:1 to 149-M:31 (1996).

NEW JERSEY

New Jersey Department of Environmental Protection

Division of Solid & Hazardous Waste

401 East State Street

P.O. Box 414

Trenton, New Jersey 08625-0414

(609) 984-6880

Web site: http://www.nj.gov/dep/dshw/08625-0414

Relevant Code Sections:

Solid Waste Management Act, N.J. STAT. ANN. §§ 13:1E-1 to 13:1E-223 (West 2003).

NEW MEXICO

New Mexico Environment Department

Environmental Protection Division, Solid Waste Bureau

1190 Saint Francis Drive

P.O. Box 26110

Santa Fe, New Mexico 87502-0110

(505) 827-2855

Web site: http://www.nmenv.state.nm.us/NMED/env_prot.html#SWB Relevant Code Sections:

Solid Waste Act, N.M. STAT. ANN. §§ 74-9-1 to 74-9-43 (Michie 2003).

Solid Waste Incineration Act, N.M. STAT. ANN. §§ 74-8-1 to 74-8-3 (West 1999).

NEW YORK

New York State Department of Environmental Conservation Division of Solid and Hazardous Materials

625 Broadway

Albany, New York 12233-7250

(518) 402-8605

Web site: http://www.dec.state.ny.us/website/dshm/index.html

Relevant Code Sections:

Collection, Treatment and Disposal of Refuse and Other Solid Waste, N.Y. ENVTL. CONSERV. LAW §§ 27-0101 to 27-1915

(Consol. 2000).

NORTH CAROLINA

North Carolina Department of Environment and Natural Resources Division of Waste Management

1646 Mail Service Center

Raleigh, North Carolina 27699-1646

(919) 733-4996

Web site: http://www.enr.state.nc.us/index.html

Relevant Code Sections:

Solid Waste Management Act of 1989, N.C. GEN. STAT. §§ 130A-309.01 to 130A-309.30 (2002).

North Carolina Scrap Tire Disposal Act, N.C. GEN. STAT. §§ 130A-309.51 to 130A-309.64 (2002).

NORTH DAKOTA

North Dakota Department of Health

Environmental Health Section, Division of Waste Management 1200 Missouri Avenue, Room 302

P.O. Box 5520

Bismarck, North Dakota 58506-5520

(701) 328-5166

 ${\it Web~site:}~http://www.health.state.nd.us/ndhd/environ/wm/index.htm$

Relevant Code Sections:

Solid Waste Management and Land Protection, N.D. CENT. CODE §§ 23-29-01 to 23-29.1-24 (1997).

Оню

Ohio Environmental Protection Agency Division of Solid & Infectious Waste 112 South Front Street

Columbus, Ohio 43215

(614) 644-2621

Web site: http://web.epa.state.oh.us/dsiwm/

Relevant Code Sections:

Solid and Hazardous Wastes, OHIO REV. CODE ANN. §§ 3734.01 to 3734.99 (Anderson 2002).

OKLAHOMA

Oklahoma Department of Environmental Quality

Land Protection Division

Solid Waste Management

P.O. Box 1677

Oklahoma City, Oklahoma 73101-1677

(405) 702-5100

Web site: http://www.deq.state.ok.us/lpdnew/swindex.html

Relevant Code Sections:

Oklahoma Solid Waste Management Act, OKLA. STAT. ANN. tit. 27A, §§ 2-10-101 to 2-10-1001 (West 2001).

OREGON

Oregon Department of Environmental Quality Land Quality Division, Solid Waste Program

811 SW Sixth Avenue

Portland, Oregon 97204

(503) 229-5913

Web site: http://www.deq.state.or.us/wmc/solwaste/rsw.htm

Relevant Code Sections:

Solid Waste Management, OR. REV. STAT. §§ 459.005 to 459.995 (2001).

Reuse and Recycling, OR. REV. STAT. §§ 459A.005 to 459A.785 (2001).

PENNSYLVANIA

Pennsylvania Department of Environmental Protection Bureau of Land Recycling and Waste Management

P.O. Box 8471

Harrisburg, Pennsylvania 17105-8471

(717) 787-6239

Web site: http://www.dep.state.pa.us/dep/deputate/airwaste/wm/default.htm

Relevant Code Sections:

Solid Waste Management Act, PA. STAT. ANN. tit. 35, §§ 6018.101 to 6018.1003 (West 1996).

RHODE ISLAND

Rhode Island Department of Environmental Management Office of Waste Management 235 Promenade Street Providence, Rhode Island 02908-5767 (401) 222-2797

Web site: http://www.state.ri.us/dem/programs/benviron/waste/index.htm

Relevant Code Sections:

Rhode Island Recycling Act, R.I. GEN. LAWS §§ 23-18.8-1 to 23-18.8-5 (2001).

Refuse Disposal, R.I. GEN. LAWS §§ 23-18.9-1 to 23-18.9-14 (2001).

Promotion of Paper Bag Usage, R.I. GEN. LAWS §§ 23-18.11-1 to 23-18.11-6 (2001).

Beverage Container Recyclability, R.I. GEN. LAWS §§ 23-18.12-1 to 23-18.12-8 (2001).

Toxic Packaging Reduction Act, R.I. GEN. LAWS §§ 23-18.13-1 to 23-18.13-12 (2001).

Plastic Bottle and Container Labeling Act, R.I. GEN. LAWS §§ 23-18.15-1 to 23-18.15-3 (2001).

Newspaper Recyclability Act, R.I. GEN. LAWS §§ 23-18.16-1 to 23-18.16-8 (2001).

Rhode Island Resource Recovery Corporation Act, R.I. GEN LAWS §§ 23-19-1 to 23-19-41 (2001).

SOUTH CAROLINA

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management

Division of Mining and Solid Waste Management

2600 Bull Street

Columbia, South Carolina 29201

(803) 896-4000

Web site: http://www.scdhec.net/lwm/

Relevant Code Sections:

South Carolina Solid Waste Policy and Management Act of 1991, S.C. CODE ANN. §§ 44-96-10 to 44-96-470 (Law. 2002).

Pollution Control Act, S.C. CODE ANN. §§ 48-1-10 to 48-1-350 (Law. 2002).

SOUTH DAKOTA

South Dakota Department of Environment and Natural Resources Waste Management Program, Solid Waste Program Joe Foss Building

523 E. Capitol

Pierre, South Dakota 57501

(605) 773-3153

Web site: http://www.state.sd.us/denr/des/wastemgn/SWaste/

SWpage1.htm

Relevant Code Sections:

Solid Waste Management, S.D. CODIFIED LAWS §§ 34A-6-1 to 34A-6-106 (Michie 1999).

TENNESSEE

Tennessee Department of Environment and Conservation

Division of Solid and Hazardous Waste Management

5th Floor, L&C Tower

401 Church Street

Nashville, Tennessee 37243-1535

(615) 532-0780

Web site: http://www.state.tn.us/environment/swm/

Relevant Code Sections:

Tennessee Solid Waste Disposal Act, TENN. CODE ANN. §§ 68-211-101 to 68-211-124 (2001).

TEXAS

Texas Commission on Environmental Quality

P.O. Box 13087

Austin, Texas 78711-3087

(512) 239-1000

Web site: http://www.tceq.state.tx.us/index.html

Relevant Code Sections:

Solid Waste Disposal Act, TEX. HEALTH & SAFETY CODE ANN. §§ 361.001 to 361.754 (Vernon 2003).

UTAH

Utah Department of Environmental Quality

Division of Solid and Hazardous Waste

P.O Box 144880

Salt Lake City, Utah 84114-4880

(801) 538-6170

Web site: http://www.hazardouswaste.utah.gov/

Relevant Code Sections:

Solid and Hazardous Waste Act, UTAH CODE

ANN. §§ 19-6-101 to 19-6-123 (2003).

Solid Waste Management Act, UTAH CODE ANN. §§ 19-6-501 to 19-6-506 (1998).

VERMONT

Waste Management Division, Vermont Agency of Natural Resources Department of Environmental Conservation,

103 South Main Street, West Building

Waterbury, Vermont 05671-0404

(802) 241-3888

Web site: http://www.anr.state.vt.us/dec/wmd.htm

Relevant Code Sections:

Waste Management, VT. STAT. ANN. tit. 10, §§ 6601 to 6622a (2003).

New Hampshire-Vermont Solid Waste Compact, VT. STAT. ANN. tit. 10, §§ 1222 to 1224 (1997).

VIRGINIA

Virginia Department of Environmental Quality

Waste Management Division

629 East Main Street

P.O. Box 10009

Richmond, Virginia 23240-0009

(804) 698-4000

Web site: http://www.deq.state.va.us/waste/

Relevant Code Sections:

Virginia Waste Management, VA. CODE ANN. §§ 10.1-1400 to 10.1-1457 (Michie 1998).

Southeast Interstate Low-Level Radioactive Waste Management Compact, VA. CODE ANN. §§ 10.1-1500 to 10.1–1504 (Michie 1998).

WASHINGTON

Washington State Department of Ecology

Solid Waste and Financial Assistance Program

P.O. Box 47600

Olympia, Washington 98504-7600

(360) 407-6133

Web site: http://www.ecy.wa.gov/programs/swfa/index.html

Relevant Code Sections:

Solid Waste Disposal, WASH. REV. CODE ANN. §§ 36.58.010 to

36.58.160 (West 2002).

Solid Waste Management—Reduction and Recycling, WASH. REV. CODE ANN. §§ 70.95.010 to 70-95-911 (West 2002).

Waste Reduction, WASH. REV. CODE ANN. §§ 75.95C.010 to 75.95C.250 (West 2002).

Solid Waste Incinerator and Landfill Operators, WASH. REV. CODE ANN. §§ 70.95D.010 to 70.95D.901 (West 2002).

WEST VIRGINIA

West Virginia Department of Environmental Protection Office of Waste Management 1356 Hansford Street Charleston, West Virginia 25301 (304) 558-5989

Web site: http://www.dep.state.wv.us/item.cfm?ssid=10

Relevant Code Sections:

Solid Waste Management Act, W. VA. CODE ANN. §§ 22-15-1 to 22-15-22 (Michie 2002).

Solid Waste Landfill Closure Assistance Program, W. VA. CODE ANN. §§ 22-16-1 to 22-16-18 (Michie 2002).

WISCONSIN

Wisconsin Department of Natural Resources Waste Management Program 101 South Webster Street P.O. Box 7921 Madison, Wisconsin 53707-7921 (608) 266-2621

Web site: http://www.dnr.state.wi.us/org/aw/wm/

Relevant Code Sections:

Solid Waste Facilities, WIS. STAT. ANN. §§ 289.01 to 289.97 (2003). Solid Waste Reduction, Recovery and Recycling, WIS. STAT. §§ 287.01 to 287.97 (2003).

WYOMING

Wyoming Department of Environmental Quality Solid and Hazardous Waste Division 122 West 25th St, Herscheler Building Cheyenne, Wyoming 82002 (307) 777-7752 Web site: http://deq.state.wy.us/shwd/index.asp?pageid=4
Relevant Code Sections:
Solid Waste Management, WYO. STAT. ANN. §§ 35-11-501 to 3511-520 (Michie 2003).

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