

## EXECUTIVE SUMMARY

On April 13, 2002 New Jersey Department of Environmental Protection Commissioner Bradley M. Campbell signed Administrative Order No. 2002-10, which requires, among other things, that the Department revise, update and readopt the Statewide Solid Waste Management Plan. There has been significant change to the landscape of solid waste management in New Jersey since the last plan update in 1993. Statewide waste flow rules have been invalidated by Federal court action, and annual increases in the state's recycling rates in the late 1980's and early 1990's have been replaced by declining rates. Once financially secure disposal facilities are struggling to maintain systems burdened with significant "stranded" debt since the "Carbone" and "Atlantic Coast" Federal Court decisions. Other notable changes that have occurred since 1993 include the partial deregulation of the solid waste utility industry and the adoption of the federal hazardous waste program. Also, the state has lost a variety of funding sources since the sunseting of several taxes, including the "recycling tax" and the Resource Recovery Investment Tax. As a result, the state, the counties and the municipalities do not have the range of resources once available to them to properly plan and implement environmentally protective solid waste management programs. It should be noted that since "Atlantic Coast" and the end of state regulatory flow control, a number of counties have undertaken constitutional re-procurement of their disposal needs in a manner that allows them to control the flow of waste and therefore their management of it. In addition, there are several counties that have instituted intra-state flow control plans. Those plans allow for the free movement of waste out-of-state; however, if the waste stays in state, it is directed to a facility in that county. Further details on the current disposal schemes in all twenty-one counties can be found in Section A of this Plan.

The Solid Waste Management Act (the Act) has provided the framework for the collection, transportation and disposal of solid waste in the State of New Jersey for over thirty years. Over that period, the Act has been amended many times, as circumstances have dictated, in order to delineate the responsibilities of municipal, county and state government in these endeavors. Under the structure in place for the last twenty eight years, the twenty one counties and the New Jersey Meadowlands District have been responsible for (among other things) the development of plans for disposal facility siting and recycling, subject to state review. Municipalities are responsible for the collection and disposal of solid waste in accordance with those county plans. Since 1987, municipalities have also been responsible for seeing that recycling programs are available for commercial, institutional and residential generators, thus meeting the mandatory recycling goals established in the Act. Generally speaking, one can qualify the Act as very successful, as it resulted in the development of millions of tons of environmentally protective solid waste disposal capacity, and established a statewide recycling program that still provides convenient and economically sustainable curbside recycling opportunities.

At various times throughout the history of the Act, the state has provided, through legislation, certain financial assistance to local governments as an aid in meeting their responsibilities under the Act. Many of those assistance programs were limited in their duration, including the assistance provided under the Mandatory Recycling Act. However, the responsibility for providing environmentally protective solid waste management, and mandatory recycling

opportunities for all generators, have not “sunset”, even if the financial assistance has. Therefore, even though this updated Statewide Solid waste Management Plan recommends the reestablishment of financial assistance especially in the area of recycling, the responsibilities of local government to provide continued recycling education, collection programs and enforcement, when appropriate, are expected, whether or not assistance becomes available.

As is further detailed in the following pages, New Jersey residents generated over nineteen million tons of solid waste in 2003, of which nine and a half million tons were disposed and over ten million tons were recycled. Of the tonnage disposed, approximately sixty percent was disposed of at in-state facilities, and forty percent (3.9 million tons) was disposed of out-of-state. This represents the largest tonnage of exported waste since 1989, and represents an increase of nearly eighty-percent since 1994, when exports of waste were at their lowest volume in the last twenty years.

Notwithstanding the framework provided by the Act for the creation of environmentally protective and cost-controlled disposal capacity, the ability to develop in-state capacity has been severely limited by the constitutional failure of the state’s long standing, former policy of “self-sufficiency”, and the waste disposal regulations which helped to implement that policy. In addition, the closure of the Fresh Kills Landfill on Staten Island has placed additional pressure on regional disposal facilities as New York City struggles to manage an average of 25,000 tons of solid waste produced there each day.

Data shows that in 2003 New Jersey generated 19.8 million tons of solid waste. We recycled 10.3 million tons or 51.8% and 9.5 million tons were sent for disposal. Of the 9.5 million tons disposed, 1.5 million or 8% of the total waste generated went to resource recovery facilities, 3.8 million or 20% was disposed at landfills located in New Jersey and 3.9 million or 19% was sent for out-of-state disposal. The data also shows that the municipal solid waste (MSW) stream recycling rate stood at 32 %, down from a high of 45% in 1995.

This plan reaffirms the state’s goal of recycling 50% of the MSW stream. The overall strategy for achieving this ambitious goal starts with a quantification, on a statewide basis, of the increased tonnage of recycled materials needed. As further detailed in Section B, an increase of 1.7 million tons of material recycled from that waste stream is necessary to achieve this goal. This is further calculated on a per county basis, with an analysis of current MSW recycling tonnages by county, and the necessary increases required by each county. The statewide increase needed is also expressed in terms of increased recycling tonnage by material, such as newspaper, corrugated, food waste, etc. Additionally, the plan targets specific classes of generators (schools, multi-family housing complexes, small and medium sized businesses) that need to be focused on in terms of expanded recycling opportunities for the materials identified.

As a critical first step in achieving the recycling goal, each county will have to adopt a new plan within one year of formal adoption of this Statewide Solid Waste Management Plan (SSWMP). In addition to providing any necessary updates to those plans, as further detailed in Section A, including but not limited to disposal and solid waste system financing strategies, new recycling plans will need to follow from the outline above. These plans will have to further identify the local strategies to be used to achieve the recycling tonnage target identified for each county, with

particular attention paid to how recycling opportunities will be provided to the generator classes targeted, methods for public promotion of these opportunities, and methods for enforcing local recycling mandates. In this regard, the Plan indicates that the Department will consider using its statutory and discretionary authority to withhold various grants from counties and/or municipalities that fail to perform adequately. In addition, all future plan amendments for new or expanded solid waste facilities shall be in conformance with the state's "smart growth" initiative regarding land use development.

The "Clean Communities and Recycling Grant Act" of 2002 provides up to \$4 million a year for municipal and county recycling programs. However, more needs to be done in this area to provide for a long-term and stable funding source for the remainder of the recycling program needs, as this Plan details in Section B.

Section C includes an analysis of the capacity for in-state disposal and recycling based on the current utilization of operating facilities in this state. Those operating utilizations range from 72 to 94 percent for MSW incinerators, 36-165 percent for landfills (indicating that some may close prior to their current estimated closure timeframe), and 75 percent for transfer stations. Partially as a result of the fact that new disposal facilities will always be difficult to site, and expansions of existing facilities are limited, this plan promotes a relatively new concept known as "sustainable landfills". There are a number of mechanisms used to sustain landfills, such as leachate recirculation, use of alternative covers, landfill mining and others.

Another critical aspect of solid waste management is the continued effort to insure that all landfills that have operated in this state have been closed properly. In this regard, the state will continue to: identify the universe and status of each landfill; put landfills on the Comprehensive Site List, as appropriate; use public funds where immediate environmental concerns warrant; promote brownfields redevelopment of closed landfills; implement a joint enforcement strategy; simplify financial assurance requirements for municipal landfills, and explore the possibility of alternatives to impervious caps on the smaller landfills in the Pinelands.

One of the principal contaminants of concern from resource recovery facilities and iron and steel smelters is mercury. While significant strides have taken place over the last decade and mercury emissions from these facilities have been greatly reduced, there is a need to do more. The Department is developing regulations that will further control mercury emissions by increasing the efficiency of mercury collection from the current standard of 80%.

Other current policy issues discussed in the Plan include a discussion on Security and Bioterrorism in Section J (Regulated Medical Waste), and scrap tire management in Section E. For the latter, a discussion of the implications of the passage of P.L. 2004, c.46, which establishes, for the first time, a permanent funding source for the remediation of scrap tire piles, is included.

The 1978 amendments to the New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-46) require that the SSWMP contain a sewage sludge management strategy. Section K fulfills the statutory mandate and replaces the 1987 SSMP. Key components of this SSMP include the following:

- A historical perspective of sludge management in New Jersey;
- A policy that promotes beneficial use, but also recognizes the need for diversification;
- New Jersey's regulatory approach to sludge including a description of permitted and prohibited practices;
- An overview of existing management including production, quality and management statistics; and
- A description of ongoing and emerging issues including phosphorus limitations in land application, odors, mercury, radionuclides, dioxins, and the most recent recommendations of the National Academy of Sciences.

The implementation of the Water Pollution Control Act has resulted in greater levels of treatment of and pollutant removal from wastewater before discharge to surface or ground waters, and the generation of larger quantities of all residuals (sewage sludge, domestic septage, potable water treatment plant sludge, food processing sludge, and other nonhazardous industrial sludge) as a by-product of this treatment. In New Jersey, domestic treatment works generated about 233,300 dry metric tons of sewage sludge in 2003. About 6 percent was disposed out-of-state, 27 percent was incinerated, and 67 percent was beneficially used, either in or out-of-state.

It is the Department's policy that generators utilize beneficial use (such as the conversion of sewage sludge into products to be used as a fertilizer or soil conditioner) wherever possible. However, further increases in in-state beneficial use will be difficult due to the pressures on available land on which to apply sewage sludge products. New Jersey is a densely populated state with minimal land area available for generators to find and develop new markets for their products. Therefore, although it is the Department's policy to encourage beneficial use alternatives, it must be recognized, due to these pressures, that a policy that also encourages diversity in management alternatives is necessary.

Additionally, the process for adoption of this Plan is recognized by the Department as an opportunity to examine, from a holistic standpoint, the overall effectiveness and efficiency of the solid waste management system in the state. Collectively, this system is intended to provide an environmentally sound and economically efficient way of managing all of the non-hazardous waste generated in the state. It is important that we continually seek greater efficiencies in the way this system operates, and the services that are provided to the citizens of New Jersey by the Department of Environmental Protection, and the regulated community of solid waste collectors/transporters and solid waste disposal facility and recycling center operators. In that regard, Section L details those recommendations for statutory and regulatory initiatives that the Department feels are necessary to move these issues forward.

It is essential that we begin now to reverse current trends on recycling, explore legislative, economic and programmatic methods to reduce annual increases in the waste stream, and expand the useful life of those disposal assets that we have. Additionally, increased transfer capacity must also be investigated. To these ends, this Plan offers recommendations for focusing awareness on, and providing financial assistance for the reduction of waste generation and increased recycling; a blueprint for achieving a recycling rate of fifty percent of the municipal waste stream in order to realize significant reductions in disposal volumes, air and water

pollutants, natural resource utilization, greenhouse gas emissions and practical mechanisms for expanding the useful life of our in-state disposal assets.