



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF THE COMMISSIONER
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(IN THE MATTER OF THE PROPOSED)
(SOLID WASTE MANAGEMENT PLAN)
(OF THE MIDDLESEX COUNTY SOLID)
(WASTE MANAGEMENT DISTRICT)

CERTIFICATION
OF
MODIFICATION

BY ORDER OF THE COMMISSIONER:

On April 19, 1979, the Middlesex County Board of Chosen Freeholders adopted the Middlesex County Solid Waste Management Plan pursuant to the Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.).

The Department of Environmental Protection has studied and reviewed the Plan in accordance with this Legislation. The review process, established by the Solid Waste Administration in an April, 1979 Policy Memorandum entitled "Policy and Procedures for Review of District Solid Waste Management Plans", was used to evaluate the Middlesex Solid Waste Management Plan. This process was designed to incorporate both State level and public comments into the review. Generally, State agencies evaluated the plan with regard to its impact on the State solid waste management program and their own programs, and provided advice within their own specialized areas of expertise. Public comments centered mostly on environmental concerns. Additionally, the State has reviewed the plan to ascertain whether there is sufficient clarity of facts and recommendations to permit program implementation.

Based on the results of this review and evaluation, it is my determination that the Middlesex County Solid Waste Management Plan be granted a Certification of Modification at this time, requiring satisfactory completion of the modifications listed herein.

The Department, as a result of its review of the Middlesex County District Solid Waste Management Plan, and in accordance with the Solid Waste Management Act, has made the following findings and conclusions:

- 1) The Solid Waste Management Act requires each District to make a survey of proposed collection districts and transportation routes, and to project the transportation costs from collection districts to existing and designated solid waste facilities. While the Middlesex County Solid Waste Management Plan includes an analysis of existing collection systems, no such analysis has been made of existing and proposed transportation routes, nor of their costs.

- 2) The Solid Waste Management Act requires the District Plan to include a solid waste disposal strategy which includes the maximum practicable use of resource recovery. The Middlesex County Plan does not include a detailed strategy for maximizing resource recovery.
- 3) The Solid Waste Management Act requires that each District Plan contain a plan for using terminated landfill disposal sites. The Middlesex County Plan does not contain such a plan.
- 4) The Solid Waste Management Act and the guidelines and criteria adopted by the Department pursuant to the Act require the District to adopt a solid waste management strategy which includes the maximum practicable use of resource recovery, including source separation and recycling. While Middlesex County did describe, in general terms, the scope and nature of existing recycling activities within the County, the information was not specific and did not evaluate the relative success of these activities. While the Plan does describe an ongoing study of intermediate processing of recyclables, coupled with curbside collection, the District lacks a comprehensive program to maximize source separation, including the identification of markets and costs, the consideration of regional source separation districts and any legal, institutional or financial measures necessary to implement the program.
- 5) The Solid Waste Management Act provides that disposal facilities within a District shall not establish rates which discriminate on the basis of the cost of disposal at a designated place of disposal. The Middlesex County Plan does not include a detailed procedure for the uniform distribution of resource recovery and disposal costs throughout the District's service area.
- 6) In the absence of a comprehensive plan for solid waste management in northeastern New Jersey, it has become necessary for the Department to develop a combined approach which will impact, to varying degrees, many Districts, including Middlesex. In light of the need for this interdistrict flow plan, it is necessary for Middlesex County to enter into interdistrict agreements with Somerset and Union Counties. These agreements will require Middlesex County to reassess its resource recovery and disposal capacity needs. In developing its combined approach for northeastern New Jersey, the Department intends to issue an "Interdistrict Waste Flow Order" that will alter solid waste collection and disposal practices in a multi-county region, including Middlesex.
- 7) The Solid Waste Management Act requires each District Plan to contain provisions for its review by the Board of Chosen Freeholders once every two years. Such provisions have not been made in Middlesex County's Plan.

Therefore, Middlesex County is hereby directed to make the following modifications to its adopted District Solid Waste Management Plan no later than July 1, 1980:

- 1) The Plan shall set forth sufficient data and discussion to identify the existing and proposed configuration of solid waste collection and disposal operations, such that a solid waste franchise system can be developed. This shall include a waste flow diagram, for each type of waste, which shows the existing and proposed flow of solid waste for the ten year planning period from each municipality (source) to a specific processing and/or disposal facility (destination). The waste flow plan shall include those out-of-county municipalities utilizing solid waste facilities within Middlesex County. This shall also identify the specific haulers now involved in collecting waste by municipality.
- 2) The Plan shall include a specific date and estimated costs for resource recovery implementation. Also to be included is a schedule (including specific milestones) for the completion of indepth studies necessary for resource recovery implementation and an indication of who will undertake the studies, an estimate of their cost, and how the studies will be funded. The studies shall include, as a minimum, the following:
 - a) the identification of and agreements/contracts for markets for materials and energy (including those for source separation/recycling),
 - b) an assessment of available resource recovery technology (including co-disposal) and an evaluation of cost/benefits,
 - c) determination of specific facility site(s), including lot and block numbers,
 - d) collection of more reliable solid waste generation and composition data and justification for facility capacity,
 - e) identification of legal and institutional constraints and solutions thereto,
 - f) projections of both capital and operating costs and the method of financing them,
 - g) environmental assessment of technology and sites, and
 - h) determination of specific sites and capacity needs for the disposal of resource recovery residuals, for emergency backup and for non-processable wastes.
- 3) The Plan shall include a detailed plan for the use of terminated land disposal sites.
- 4) The District shall complete its study of curbside collection programs and shall include a more comprehensive program for extracting the maximum practicable amount of recoverable materials via recycling, waste exchanges, and similar source separation programs.

- 5) The Plan shall include a more detailed procedure for the uniform distribution of resource recovery and disposal costs throughout the District's service area. This plan shall include the costs necessary to upgrade existing disposal facilities to meet environmental regulations.
- 6) The Plan shall include interdistrict agreements with Union and Somerset Counties for implementing that part of the "Interdistrict Waste Flow Order" impacting the Middlesex District.
- 7) The Plan shall include a revised resource recovery and disposal strategy to provide for the necessary additional capacity required as a result of the "Interdistrict Waste Flow Order". In addition, the County should only provide resource recovery and disposal capacity for out-of-state wastes which are covered by long term contracts.
- 8) In addition, Middlesex County is directed to complete the additional modifications to its Solid Waste Management Plan described in the document attached to this Certification as Appendix I by July 1, 1980.
- 9) The Plan shall be modified to contain provisions for its review by the Board of Chosen Freeholders not less than once every two years following the Department's approval.

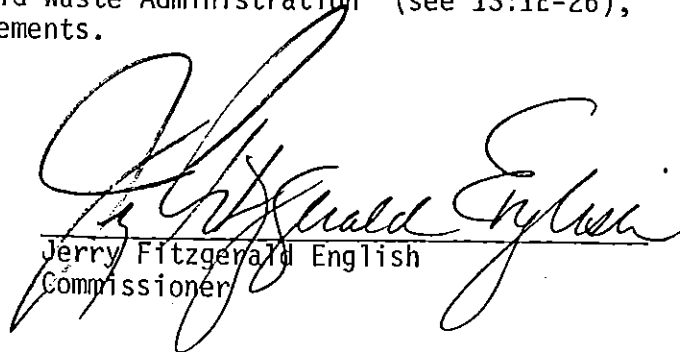
Attached as Appendix II is a list of recommended modifications to be included in the District Solid Waste Management Plan as part of the two year review and modification required pursuant to N.J.S.A. 13:1E-20.

In accordance with N.J.S.A. 13:1E-24, these required modifications shall be considered major modifications of the District Plan and the District is hereby directed to conduct an additional public hearing no later than 45 days from the date of this Certification.

Following submission and review of the adopted modifications, I shall, within 30 days of submittal, certify to the Board of Chosen Freeholders whether or not these modifications are acceptable and if the Plan is approved.

Further, it is noted that this Certification should not be construed by any District or others involved in solid waste management as an endorsement of any existing or proposed solid waste facility included in the solid waste management plan. Existing and proposed facilities, are approved only in concept and will still be subject to final Department approval, pending further detailed studies, compliance with the "Rules of the Solid Waste Administration" (see 13:1E-26), and any other State or federal requirements.

21 September 1979
Date


Jerry Fitzgerald English
Commissioner

Additional Modifications
Required by July 1, 1980

I. SOLID WASTE GENERATION

- The Plan should include an inventory by source, type, composition, and quantity of solid waste (including sludge and septage) generated within the solid waste management District in the year in which the report is prepared and each of the ten years following the report. Specific data relating to the Middlesex County weighing program (types of wastes weighed, type of system/scale employed, municipalities included) should be included in the Plan. In addition, the Plan should include a specific timetable for the conduct of a more accurate program defining waste generation rates and composition.

II. COLLECTION AND HAUL

- A portion of Middlesex County's waste is exported to other Districts. The report fails to identify what wastes are exported, where they originate and where they are going to.
- The Plan did not provide a specific analysis of industrial waste generation, transportation and disposal within the County. In addition, a strategy for the maximum recovery of industrial wastes should be developed. A specific timetable for undertaking this analysis and developing a strategy should be included.
- The Plan does not discuss the operations of the transfer station located in Perth Amboy nor the proposed transfer station to be built in Carteret. The Plan should assess the Carteret proposal and determine whether it should be included in the Plan.
- The Plan does not project transportation costs from collection districts to disposal sites. The Plan shall include these cost projections.

III. SLUDGE AND SEPTAGE

- The Middlesex County Sewage Authority's (MCSA) interim alternatives for sludge disposal have not been finalized (per information supplied by the DEP Office of Sludge Management). No application for on-site disposal has been filed with the Solid Waste Administration, and apparently MCSA is still interested in using either the Edgeboro or Global landfill for disposal of dewatered sludge. Therefore, the District should evaluate the potential impact of dewatered sludge disposal at the Edgeboro and Global landfills. Sufficient interest has been expressed in these sites by MCSA as well as other sewerage authorities to warrant such a study. The District should then take a firm position as to whether and under what conditions sludge disposal will be allowed at these sites.
- The section dealing with septage generation and disposal is inadequate. In mid-1978, steps were taken to divert all Middlesex County septage from the Lone Pine Landfill (Monmouth County) to the MCSA plant. Verification of this for all communities (not just the three specifically mentioned) is needed. In addition, emergency arrangements were made

in the summer of 1979 to allow disposal of septage from Monmouth and Ocean Counties into the MCSA plant. The County should provide an evaluation of this practice and its potential impact on future septage disposal practices within the County. Also, the future generation of septage, and an evaluation of transportation and disposal needs should be included in this report.

- The work of the 208 Water Resources Program should be recognized in the Plan and consideration shall be given to the designation of septic management Districts.

IV. RESOURCE RECOVERY

- The Plan does not distinguish between that part of the waste stream which will be recovered by high and low technology resource recovery. An analysis of the most appropriate mix of high and low technology should be undertaken in order to minimize costs, conserve energy and enhance environmental quality.

V. PUBLIC PARTICIPATION

- The County undertook a good public participation program including excellent use of its Solid Waste Advisory Council and its newsletter. The Plan does not, however, identify a specific on-going program for continued public input to the Solid Waste Management Program. Therefore, modifications shall include a specific program by which the public will be afforded the opportunity to provide continued input to the ten year planning and implementation process.

Appendix II

Recommended Modification for Two-Year Update of the Middlesex County Solid Waste Management Plan

I. DATA BASE

- The Plan should contain a section on existing major industrial and institutional developments and utilities. Proposed developments and constraints to development should also be included.
- A table showing existing land distribution (amount and percent) for single family residential, multi-family residential, commercial, industrial, public and quasi-public, conservation and recreation, and open space areas should be included.
- Estimates and projections for population should show the specific methodology employed and why certain assumptions were employed.
- The Plan should include population projections consistent with year 2000 policy projections from the NJDEP, Draft New Jersey Water Quality Management Plan, March, 1979.
- Employment projections should be presented according to standard industrial classification to provide consistency with other District data. Methodologies and assumptions used in the formulation of estimates and projections should be included.

II. SOLID WASTE GENERATION

- Solid waste estimates and projections should be provided according to waste identification categories in the NJDEP "Rules of the Solid Waste Administration." This format will provide consistency among District data.
- The updated Solid Waste Management Plan should include, in an appendix, the specific methodology used in obtaining solid waste estimates and projections.
- A more intensive commercial and industrial solid waste generation survey should be carried out in an attempt to more accurately depict the quantity and quality of waste generated from these sources. The survey method should involve questionnaire mailings, phone interviews and personal interviews. The commercial and industrial streams account for approximately 55% of the solid waste stream. Dependency on the sources of information identified in the Plan limits the accuracy of the generation figures provided. The data acquired from the 1974 Plan, and figures projected from this data base, is dated and can very well be misleading due to the economic recession that the State was entering into at the time. In addition, reliance on DEP collector/hauler registration figures is limited due to a tendency to incorporate both municipal and commercial waste under a singular

title. There should also be an attempt to segregate out bulky waste figures from the municipal waste totals to provide a more accurate determination of processible solid waste that can be handled by resource recovery facilities.

- The use of the American Public Works Association 0.07 lbs./capita/year average generation rate increase, projected nationally, is limited due to the fact that it is a national average. A generation rate average should be developed based on local demographic and geographic parameters.

III. COLLECTION AND HAUL

- The Plan should contain an analysis of the feasibility of alternative collection practices and should require the modifications of those practices where appropriate. This feasibility analysis should include an assessment of the feasibility of eliminating twice a week collection in those areas where recycling programs are successful.
- The Plan projects that at the end of the ten years landfills taking municipal wastes will be clustered in the northern part of the county around the Raritan River. The implications of this should be addressed, particularly with regard to the necessary strategies for transfer of the waste or the provision of additional facilities in the southern county area.

IV. LANDFILLS

- The Plan should contain a detailed discussion of the necessary environmental improvements to landfills.