



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
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IN THE MATTER OF CERTAIN AMENDMENTS
TO THE ADOPTED AND APPROVED SOLID
WASTE MANAGEMENT PLAN OF THE
UNION COUNTY SOLID WASTE
MANAGEMENT DISTRICT

CERTIFICATION
OF THE DECEMBER 13, 1990
AMENDMENT TO THE UNION COUNTY
DISTRICT SOLID WASTE MANAGEMENT PLAN

BY ORDER OF THE COMMISSIONER:

A. Introduction

The New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) established a comprehensive system for the management of solid waste in New Jersey. The Act designated all twenty-one (21) of the state's counties, and the Hackensack Meadowlands District, as Solid Waste Management Districts, and mandated that the Boards of Chosen Freeholders and the Hackensack Meadowlands Development Commission develop comprehensive plans for waste management in their respective districts. On August 13, 1980, the Department of Environmental Protection (Department or DEP) approved, with modifications, the Union County District Solid Waste Management Plan (County Plan).

The Act requires that all district plans be based on and accompanied by a report detailing the existing waste disposal situation in the district, and a plan which includes the strategy to be followed by the district in meeting the solid waste management needs of the district for a ten-year planning period. The report must detail the current and projected waste generation for the district, inventory and appraise all facilities in the district, and analyze the waste collection and transportation systems which serve the district. The disposal strategy must include the maximum practicable use of resource recovery techniques. In addition to this strategy, the plan must designate sufficient available suitable sites for the disposal of the district's waste for a ten-year period, which sites may be in the district or, if none are available, in another district. (The Act provides procedures for reaching any necessary interdistrict agreements.)



The Act further provides that a district may review its plan at any time and, if found inadequate, a new plan must be adopted. The Union County Board of Chosen Freeholders (County Freeholders) completed such a review and on December 13, 1990 adopted an amendment to its approved County Plan. The amendment proposed the district plan inclusion of a small-scale incinerator at the Merck & Company facility in Linden.

The amendment was received by the Department on February 26, 1991 and copies were distributed to various state level agencies for review and comment, as required by law. The Department has reviewed this amendment, as well as the entire County Plan, and has determined that the amendment adopted by the County Freeholders on December 13, 1990 including the Merck & Company incinerator is approved with modification as a noncommercial facility as that term is defined at N.J.S.A. 13:1E-48.3. While the immediate plan amendment has been approved with modification, deficiencies within the County Plan have been identified within Section C. of this certification and pertain to the use of planned landfills, a financing and a transportation plan for these facilities, and the need to address the recommendations of the Governor's Emergency Solid Waste Assessment Task Force Final Report.

B. Findings and Conclusions with Respect to the Union County District Solid Waste Management Plan Amendment

Pursuant to N.J.S.A. 13:1E-24a(1), I, Scott A. Weiner, Commissioner of the Department, have studied and reviewed the December 13, 1990 amendment to the County Plan according to the objectives, criteria, and standards developed in the Statewide Solid Waste Management Plan and I find and conclude that this plan amendment, as modified, is consistent with the Statewide Solid Waste Management Plan.

In conjunction with the review of the amendment, the Department circulated copies to sixteen review agencies and solicited their review and comment. Pursuant to N.J.S.A. 13:1E-24a(2) and (3), these agencies included various bureaus, divisions, and agencies within the Department as well as the Board of Public Utilities (BPU). Among these agencies were the following:

Division of Environmental Quality, DEP
Division of Water Resources, DEP
Division of Coastal Resources, DEP
Division of Parks and Forestry, DEP
Division of Fish, Game and Wildlife, DEP
Division of Solid Waste Management, DEP
Green Acres Program, DEP
Board of Public Utilities
New Jersey Turnpike Authority
New Jersey Advisory Council on Solid Waste Management
Department of Agriculture
Department of Health
Department of Transportation
Department of Community Affairs
Department of the Public Advocate
U.S. Environmental Protection Agency

1. Agency Participation in the Review of the December 13, 1990 Amendment

The following agencies did not object to the December 13, 1990 proposed amendment:

Division of Water Resources, DEP
Division of Parks and Forestry, DEP
Division of Fish, Game and Wildlife, DEP
Board of Public Utilities
New Jersey Turnpike Authority
New Jersey Advisory Council on Solid Waste Management
Department of Agriculture
Department of Transportation
Department of Community Affairs

The following agencies did not respond to our request for comments:

Green Acres Program, DEP
Department of Health
Department of the Public Advocate
U.S. Environmental Protection Agency

The following agencies submitted substantive comments which are further addressed below:

Division of Environmental Quality, DEP
Division of Coastal Resources, DEP
Division of Solid Waste Management, DEP

2. Comments Received for the December 13, 1990 Amendment

Comment: The Division of Environmental Quality (DEQ) commented that incinerators are subject to the provisions of N.J.A.C. 7:27-5, "Prohibition of Air Pollution." This regulation prohibits odors and other air contaminants which interfere with the enjoyment of life or property.

Incinerators are also regulated under N.J.A.C. 7:27-11, "Incinerators." This subchapter defines the construction, operation, and emission standards for all incinerators. Additionally, incinerators are subject to the provisions of N.J.A.C. 7:27-8.2(a)14, which require permits and certificates for any incinerator.

New and modified equipment which emits air contaminants must incorporate advances in the art of air pollution control. For incineration, this usually includes scrubbing for hydrochloric acid control, a baghouse for particulate control, and burners in a secondary combustion zone for hydrocarbon control.

The DEP had accepted much less stringent control for incineration facilities under 800 pounds per hour charging capacity, but tightened its guidelines in June 1989. At this time, DEP requires that, at a minimum, scrubber air pollution control shall be installed achieving less than 0.03

grains of particulates per dry standard cubic feet (gr/dscf), adjusted to 7% oxygen, and at least 90% reduction in hydrochloric acid emissions. If feasible, new incineration facilities are required to install more advanced control technologies, such as spray driers and baghouses, to achieve 0.015 gr/dscf at 7% oxygen. Also, the DEP is considering rule making to require retrofit for better air pollution control of existing waste incinerators.

At this time any permit application for waste incineration should include:

- a. Air quality modelling and an evaluation of downwash, which demonstrate sufficient stack height;
- b. Cancer risk assessment for metals and dioxin, demonstrating low cancer risk on and off site;
- c. Continuous emission monitoring and recording for carbon monoxide, oxygen, and secondary chamber temperature;
- d. Extensive stack testing after construction;
- e. Compliance with the Department's "Air Pollution Control Guidelines for Resource Recovery Facilities and Incinerators" March 1983, Amended November 1, 1984, Amended April 1987, if over 800 pounds per hour.

Also, the DEQ noted that the inclusion of small-scale medical and certain industrial waste incinerators in solid waste management plans is consistent with the plans and programs administered by this division if these incinerators comply with all air pollution control requirements. The inclusion of small apartment house incinerators, and other incinerators for which the waste could be directed to a better controlled resource recovery facility, is generally not consistent with air pollution control plans.

For municipal solid waste which could be directed to a better controlled larger incinerator, the Department would subject a small incinerator to the same standards as new large incinerators. A consequence of this is that permits for apartment house incinerators which do not achieve such standards would likely be disapproved. Other specialty incinerators such as for hospital waste or sewage sludge can be permitted consistent with the above guidelines. Existing apartment house and other small incinerators should be phased-out as better controlled resource recovery facilities become operational.

Response: The issue of specific permitting requirements for an incinerator is more appropriately addressed during the Department's technical phase of the permit review process. The Engineering Element of the Department's DSWM will be apprised of this comment and, by copy of this certification, I also notify the County Freeholders and Merck & Company of these comments and the DEQ of my response.

Comment: The Division of Coastal Resources (DCR) commented that after reviewing the topographic maps and photo-quarterquad data there exists on site a "blue line" stream (Kings Creek). It is highly recommended that a request for Jurisdictional Determination be made to the DEP, Division of Coastal Resources, Technical Services Northeast, at (609) 984-0194. This Jurisdictional Determination will inform the applicant whether or not any stream encroachment permits will be necessary.

Response: I direct Merck & Company to contact the DEP office listed above for a determination concerning any stream encroachment permits which may be required for facility construction and operation. By copy of this certification, I notify the County Freeholders and Merck & Company of these comments and the DCR of my response.

Comment: The Division of Solid Waste Management (DSWM) commented that the plan amendment as adopted and submitted to the DEP incorrectly identified the incinerator site to be located at Lot 67, Block 407, in the City of Linden. The actual proposed incinerator site is Lot 67, Block 470, in the City of Linden. The County Freeholders have since adopted a subsequent resolution on May 9, 1991 correctly identifying the site of the proposed incinerator at the Merck & Company plant location in Linden.

Further, the DSWM commented that any incinerator is required to obtain a solid waste facility permit in accordance with N.J.A.C. 7:26-2B. Also, on March 6, 1989, the "Comprehensive Regulated Medical Waste Management Act," P.L. 1989, c. 34, was signed into law. This legislation provides a distinction between a commercial facility and a noncommercial facility and defines a noncommercial facility as one "which accepts regulated medical waste from other generators for a cost based fee not in excess of the costs actually incurred by the facility or on site generator for the treatment or disposal of the regulated medical waste." The Act also grandfathered all existing medical waste disposal facilities in their respective district solid waste management plans. Unless a facility was acting as a commercial facility prior to March 6, 1989 and was, therefore, grandfathered in the district plan, approval of a medical waste incinerator must be limited to a noncommercial facility only. Merck & Company has historically operated three incineration units at their Linden campus on a noncommercial basis, which will be phased-out by the unit proposed in the December 13, 1990 amendment.

Additionally, the DSWM noted that the amendment fails to specify how the County will achieve the 60% recycling rate as called for in the Emergency Solid Waste Assessment Task Force Final Report of August 6, 1990. In compliance with the Task Force's Final Report, the Division recommends that the County adopt an amendment to indicate how it will achieve the minimum 60% recycling rate by 1995 and, also, how it will achieve source reduction, in light of increased solid waste generation, through implementation of specific programs as outlined in the report. Finally, the regionalization of long-term materials processing, recycling, transfer and disposal facilities should also be addressed by the County Freeholders

in a subsequent plan amendment submission. It is acknowledged that the County is actively pursuing implementation of the Task Force recommendations as part of the Service Agreement review process under the McEnroe provisions of the Solid Waste Management Act. However, the County's source reduction and recycling plan, as well as any interdistrict agreements for regional solid waste management, must also be included within the County Plan.

Response: The inclusion of a noncommercial small-scale medical waste incinerator at the Merck & Company facility in Linden is approved with modification of the site designation as set forth in Section C. Also within Section C., I direct the County Freeholders to address in a subsequent plan amendment submission, the goals delineated in the Task Force Final Report. Finally, by copy of this certification, I notify the County Freeholders and Merck & Company of the need to obtain a solid waste facility permit prior to the operation of the incinerator and I notify the DSWM of my response.

C. Certification of the Union County District Solid Waste Management Plan Amendment

I, Scott A. Weiner, Commissioner of the Department, in accordance with N.J.S.A. 13:1E-1 et seq., specifically N.J.S.A. 13:1E-21, which establishes specific requirements regarding the contents of the district solid waste management plans, have reviewed the December 13, 1990 amendment to the approved County Plan and certify to the County Freeholders that the December 13, 1990 amendment is approved with modification as further specified below.

1. December 13, 1990 Amendment

While the December 13, 1990 amendment misidentifies the site of the Merck & Company small-scale medical waste incinerator on Lot 67, Block 407, in Linden, Union County, the County Freeholders have since adopted a subsequent resolution on May 9, 1991 correctly identifying the location of the incinerator. Therefore, the district plan inclusion of the site for the Merck & Company noncommercial small-scale medical waste incinerator located at 67, Block 470, in Linden, Union County, is herein approved with modification providing the appropriate block. This modification does not require subsequent County Freeholder action.

The incinerator will have a maximum capacity of 9.6 tons per day, although the capacity will be the subject of a more detailed review when a permit application is submitted. Materials to be incinerated shall be restricted to nonhazardous medical and special site wastes generated at the Merck & Company plant. The specific materials authorized for acceptance at this facility will also be determined during the permit review process. Under no circumstance may Merck & Company incinerate recyclable materials mandated by the City of Linden or the County, and the company must submit quarterly recycling reports to these entities. Merck & Company shall dispose of its nonprocessable waste pursuant to the County Plan and furnish proof of said disposal to the County.

Under the Comprehensive Regulated Medical Waste Management Act (P.L. 1989, c. 34) a moratorium, until the medical waste state plan is completed, is imposed on DEP approval or consideration of any new commercial medical waste incinerator. Therefore, the plan inclusion approval of new facilities which were not in operation and accepting regulated medical waste on or prior to March 6, 1989 is restricted to facilities limited to noncommercial use. The old Merck & Company incinerators have been operating for several years. The Department notes that such operation was for noncommercial use and entailed the incineration of wastes generated on site at the Merck & Company plant. Therefore, the small-scale medical waste incinerator which is the subject of this certification is approved only as a noncommercial facility.

Nevertheless, Merck & Company must submit to the Department a certified affidavit verifying the noncommercial status of the new facility. This affidavit, a sample of which may be obtained by contacting the DEP, DSWM, Bureau of Special Waste Planning, must be submitted within 45 days of the date of this certification. In addition, by copy of this certification, the applicant is hereby directed to contact the DEP, DSWM, Bureau of Resource Recovery, to obtain a solid waste facility permit and to contact the DEP, DEQ, Bureau of Air Quality Planning and Evaluation, to obtain an air pollution apparatus permit. The construction or operation of any solid waste facility shall be preceded by the acquisition of all necessary permits and approvals pursuant to N.J.S.A. 13:1E-1 et seq., and all other applicable laws. The issuance of operating permits pursuant to the Solid Waste Management Act is limited to those applicants found by the Department and the Attorney General to be deserving of licensing under the provisions of N.J.S.A. 13:1E-126.

2. Union County District Solid Waste Management Plan Deficiencies

In addition, the Department has reviewed the entire County Plan, including this amendment, to determine whether the plan fulfills the requirements set forth in N.J.S.A. 13:1E-21. Following this review, I have identified deficiencies within the County Plan and the County is hereby directed to submit a subsequent plan amendment within 180 days which addresses the following deficiencies:

- a. N.J.S.A. 13:1E-21b(3) requires a site plan which shall include all existing solid waste disposal facilities located within the solid waste management district and sufficient additional available suitable sites to provide solid waste facilities to treat and dispose of the actual and projected amounts of solid waste contained in the report accompanying the plan.

The County amended its plan on September 11, 1986 to designate a specific site in the City of Elizabeth for development of a County landfill. As noted in the February 23, 1987 certification of the September 11, 1986 amendment, and as is still the case, ambiguity exists as to the County's intentions with respect to using the Linden and Elizabeth landfills for disposal purposes. This

ambiguity must be addressed by the County in writing and should contain a status summary of efforts to develop landfill capacity, planned waste type allocations and schedules for implementing one or both of these landfills. Until this ambiguity is addressed, the County remains deficient with respect to N.J.S.A. 13:1E-21b(3).

- b. N.J.S.A. 13:1E-21b(4) requires a survey of proposed collection districts and transportation routes, with projected transportation costs from collection districts to existing or available suitable sites for solid waste facilities.

Until the County adopts a plan amendment designating transportation routes to either the Linden or Elizabeth landfill, the County remains deficient with respect to N.J.S.A. 13:1E-21b(4).

- c. N.J.S.A. 13:1E-21b(6) requires a method or methods of financing solid waste management in the Solid Waste Management District pursuant to the Solid Waste Management Plan.

The County Plan remains deficient with respect to the requirements of N.J.S.A. 13:1E-21b(6) until comprehensive financial plans are approved for either the Linden or Elizabeth landfills.

3. Union County Response to Solid Waste Task Force Final Report

Finally, I have reviewed the County Plan to determine whether it fulfills the recommendations of the Emergency Solid Waste Assessment Task Force Final Report accepted by the Governor on November 16, 1990. Following this review, I have determined that the County Freeholders have not addressed the recommendations of the Task Force Final Report within the County Plan. I acknowledge that the County has been actively pursuing the development of plans and strategies toward implementing the Final Report recommendations through the Service Agreement review process, primarily through submissions to the BPU and DEP's DSWM. In order to update the County Plan, the County Freeholders are hereby directed to submit a subsequent plan amendment within 180 days of this certification to address the following provisions of source reduction, recycling and regionalization:

- a. Source Reduction: The County shall determine what source reduction measures can be taken at the County level to eliminate the trend of increased per capita solid waste generation. For each noted source reduction measure, the County shall estimate its potential impact upon total solid waste generation within the district.
- b. Recycling: The County shall determine what measures will be taken by the district to achieve at least a 50% recycling rate for the municipal waste stream, including yard waste, and a 60% recycling rate for the entire waste stream by December 31, 1995. This determination shall address, at a minimum, what additional facilities will be needed within the district; what sites already exist or under what procedure the district will select necessary sites; and under what schedule the district feels that each necessary facility can be brought into operation.

Also, for each component of the recycling strategy, the district shall outline estimates of the tonnages which can be recycled in a mass balance format taking into consideration the total projected solid waste generation in the County. Further, based upon the minimum 50% and 60% recycling rates, the district must outline the amount of solid waste still requiring disposal. Finally, the County must consider the establishment of blanket facility inclusion and plan modification procedures to enable the expedited development of needed capacity and approvals for yard waste composting facilities, recycling centers, materials markets and minor program policies.

- c. Regionalization: The County shall determine the extent to which it can undertake long-term regionalization of its solid waste facilities and programs with other districts to provide regional solutions to solid waste management. Consideration should be given to regional plans for materials processing, recycling, transfer and disposal facilities.

D. Other Provisions Affecting the Plan Amendment

1. Contracts

Any contract renewal or new contract for solid waste collection or disposal which is inconsistent with the within amendment to the County Plan and which was executed prior to the approval of this amendment and subsequent to the effective date of the Solid Waste Management Act (July 29, 1977), and which shall further be for a term in excess of one year, shall immediately be renegotiated in order to bring same into conformance with the terms and provisions herein set forth. Any solid waste collection operation or disposal facility registered by the Department and operating pursuant to a contract as herein described, shall be deemed to be in violation of this amendment and of the County Plan if such renegotiation is not completed within ninety (90) days of the effective date of this amendment, provided, however, that any such registrant may, upon application to the Department and for good cause shown, obtain an extension of time to complete such renegotiation.

2. Compliance

All solid waste facility operators and transporters registered with the Department and operating within the County and affected by the amendment contained herein shall operate in compliance with this amendment and all other approved provisions of the County Plan. Any facility operator or transporter who fails to comply with the provisions contained herein shall be deemed to be in violation of N.J.S.A. 13:1E-1 et seq., in violation of N.J.A.C. 7:26-1 et seq., and in violation of their registration to operate a solid waste facility or a collection system issued thereunder by the Department and shall be subject to the provisions and penalties of N.J.S.A. 13:1E-9 and 12 and all other applicable laws.

3. Types of Solid Wastes Covered by the District Solid Waste Management Plan

The provisions of the County Plan shall apply to all solid wastes defined in N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-2.13 with the exception of liquid wastes, sewage sludge, septage, and hazardous wastes. All nonhazardous

materials separated at the point of generation for sale or reuse are excluded from the waste flows designated in the Interdistrict and Intradistrict Waste Flow Rules set forth at N.J.A.C. 7:26-6.

4. Certification to Proceed with the Implementation of the Plan Amendment

This document shall serve as the certification of the Commissioner of the Department to the County Freeholders and pursuant to N.J.S.A. 13:1E-24c and f, the County shall proceed with the implementation of the approved amendment certified herein.

5. Definitions

For the purpose of this amendment and unless the context clearly requires a different meaning, the definitions of terms shall be the same as those found at N.J.S.A. 13:1E-3 and -99.12 and N.J.A.C. 7:26-1.4 and -2.13.

6. Effective Date of the Amendment

The amendment to the County Plan contained herein shall take effect immediately.

7. Reservation of Authority

Nothing contained herein shall be construed as a limitation on any other action taken by the Department pursuant to its authority under the law. The County Plan, including any amendment made thereto, shall conform with the Statewide Solid Waste Management Plan. The Department has published a Statewide Solid Waste Management Plan, with appendices, which includes the Department's planning guidelines, rules, regulations, orders of the Department, interdistrict and intradistrict waste flow rules, and also includes the compilation of individual district plans and amendments as they are approved.

E. Certification of Approval With Modification of the Amendment and Notification of Deficiencies by the Commissioner of the Department of Environmental Protection

In accordance with the requirements of N.J.S.A. 13:1E-1 et seq., I hereby approve the amendment with modification, as outlined in Section C. of this certification, to the Union County District Solid Waste Management Plan which was adopted by the Union County Board of Chosen Freeholders on December 13, 1990. Further, pursuant to Section C., I hereby also require a subsequent amendment submission by the Union County Board of Chosen Freeholders to address the noted deficiencies within 180 days of the date of this certification.

7-25-9.
DATE


SCOTT A. WEINER
COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL PROTECTION