

# STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION RICHARD T. DEWLING, Ph.D., P.E., COMMISSIONER

CN 402 TRENTON, N.J. 08625 609 - 292 - 2885

(IN THE MATTER OF CERTAIN AMENDMENTS)
(TO THE ADOPTED AND APPROVED SOLID)
(WASTE MANAGEMENT PLAN OF THE)
(BURLINGTON COUNTY SOLID WASTE)
(MANAGEMENT DISTRICT)

CERTIFICATION
OF THE AUGUST 13, 1986
AMENDMENT TO THE BURLINGTON 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 Board of Chosen Freeholders and the Hackensack Meadowlands Development Commission develop comprehensive plans for waste management in their respective districts. On October 27, 1980, the Department approved, with modifications, the Burlington County District Solid Waste Management Plan.

The Act requires that all district plans be based on and accompanied by a report detailing the existing waste management 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 the 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 management 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 management of the district's waste for the 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.)

In addition to the above, the Act requires each district to include within its plan a strategy for the management of sludge. The Act requires that the plans provide for inventories and projections of the amounts and compositions of sludges generated within the district, as well as a strategy to be applied in the district providing for the maximum practical processing of all sludge generated therein.

The Burlington County Board of Chosen Freeholders completed its sludge plan and on August 13, 1986, adopted it as an amendment to its approved district solid waste management plan. Also included within the district Sludge and Septage Management Plan are various proposed modifications which address solid wastes other than sludge. At the same time, other amendments were adopted which proposed inclusion of the district's recycling plan, a waste flow redirection to the Fort Dix Heat Recovery Incinerator, and a financial plan for disbursement of funds from the district's resource recovery investment tax fund.

The amendments were received by the Department of Environmental Protection on August 29, 1986, and copies were distributed to various state level agencies for review and comment, as required by law. On October 29, 1986 Burlington County requested, by letter, that the Department process the sludge and septage management plan amendment separately from the other plan amendments. This request was made to allow for expedited certification of the other amendments since the sludge and septage management plan component of the county's submission was of a more complex nature requiring substantive technical review. On December 5, 1986 the Department certified approval of the district's recycling plan, waste flow redirection to the Fort Dix Heat Recovery Incinerator, and resource recovery investment tax fund financial plan.

This certification addresses the district's sludge and septage management plan. The Department has reviewed this amendment, as well as the entire Burlington County District Solid Waste Management Plan, and has determined that the amendment adopted by the Burlington County Board of Chosen Freeholders on August 13, 1986, is approved in part and rejected in part as provided in N.J.S.A. 13:1E-24.

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

Pursuant to N.J.S.A. 13:1E-24a(1), I, Richard T. Dewling, Commissioner of the Department of Environmental Protection have studied and reviewed the August 13, 1986, amendment to the Burlington County District Solid Waste Management Plan and have been guided by the objectives, criteria, and standards developed in the Statewide Solid Waste Management Plan and draft Statewide Sludge Management Plan. I find and conclude that parts of this plan amendment are consistent and others inconsistent with the Statewide Solid Waste Management Plan and the draft Statewide Sludge Management Plan and Departmental policies as further addressed in Section C. of this certification.

In addition, the Division of Solid Waste Management circulated the plan amendment to seventeen review agencies and solicited their review and recommendations. Pursuant to N.J.S.A. 13:1E-24a(2) and (3), these agencies included various agencies, bureaus, and divisions within the Department of Environmental Protection, as well as the Board of Public Utilities. Also among these agencies were the Department of Community Affairs, the Department of the Public Advocate, the Department of Health, the Office of Recycling, the Department of Agriculture, the Department of Transportation, and the New Jersey Turnpike Authority. Of these agencies, the following did not object to the proposed plan amendment: the N.J.D.E.P. Divisions of Environmental Quality, Fish, Game and Wildlife, Parks and Forestry, and Coastal Resources; the State Departments of Agriculture, Health, Community Affairs, and Transportation: the Board of Public Utilities, and the Office of Recycling. The following agencies failed to respond to our requests for comments: the State Department of the Public Advocate; the Green Acres Program,

the Pinelands Commission, the New Jersey Turnpike Authority, the New Jersey Advisory Council on Solid Waste Management and the U.S. Environmental Protection Agency. The Division of Water Resources submitted substantive comments which are further addressed below.

The Division of Water Resources (DWR) cited numerous deficiencies within the Burlington County Sludge and Septage Management Plan. These deficiencies include both technical and legal issues that must be addressed before full approval of the county's proposed plan for the management of sludge and septage. The deficiencies noted by the DWR have been enumerated in Section C. of this certification. In response to the concerns raised by the DWR, the Department has approved in part and rejected in part the amendment as specified in Section C. below.

# C. <u>Certification of Burlington County District Solid Waste Management Plan</u> <u>Amendment</u>

I, Richard T. Dewling, Commissioner of the Department of Environmental Protection, in accordance with N.J.S.A. 13:1E-1 et seq. and N.J.S.A. 13:1E-21, which established specific requirements regarding the contents of the district solid waste management plans, have reviewed the August 13, 1986, amendment to the approved Burlington County District Solid Waste Management Plan and certify to the Burlington County Board of Chosen Freeholders that the August 13, 1986 amendment is approved in part and rejected in part as further specified below.

# 1. Approved Portions of the Burlington County Plan Amendment

- Long-Term Facility Designation (Page 61): The county has proposed the inclusion within the plan of a co-composting facility for the processing of municipal solid waste and dewatered sludge to be located on Block 174, Lot 3, in Florence Township. The inclusion within the plan of this management facility is consistent with a prior Departmental certification of April 18, 1983 which approved the Burlington County Solid Waste Management Facilities Complex and is therefore approved. The construction or operation of this facility must be preceded by the acquisition of all necessary permits and approvals pursuant to N.J.S.A. 13:1E-1 et seq., N.J.S.A. 58:10A-1 et seq., and all other applicable laws. Issuance of operating permits is limited to those applicants found by the Department and the Attorney General to be deserving of licensing under N.J.S.A. 13:1E-126 et seq. Any sludge accepted by this facility must meet the Department's standards for quality and the facility must produce a stabilized compost in accordance with 40 CFR part 257. These issues will be further discussed below.
- b. Interim Sludge Waste Flow Program (Page 127): The county has proposed an interim waste flow program for sludge for inclusion within the plan to cover the period from Departmental certification of the amendment to commencement of operations at the co-composting facility. This waste flow program specifies that the county will not direct waste flows for sludge except in a sludge emergency. This action will provide generators with maximum flexibility in their choice of disposal facilities (land application, out-of-state landfilling, incineration). The inclusion within the plan of this interim sludge waste flow program,

with the exception of certain sludge provisions further addressed in Section C. below, is approved.

- c. Long-Term Sludge Waste Flow Program (Page 106): The county has proposed a long-term waste flow program for sludge for inclusion within the plan that commences with the operation of the co-composting facility. This program calls for the maximum reuse of sludge through co-composting of dewatered sludge and municipal solid waste, and the land application of liquid sludge. This strategy is consistent with the intent of the Solid Waste Management Act and is, therefore, approved for inclusion within the plan subject to applicable regulations which may be hereafter adopted (all sludge must meet the appropriate sludge quality and solids content criteria prior to management at the designated primary site).
- d. Plan Implementation Agency (Page 145): The county has proposed the designation of the Office of Waste Management within the Burlington County Health Department as the implementing agency for the district Sludge and Septage Management Plan. This designation is approved for inclusion within the plan.
- Solid Waste Disposal Strategy (Page 97): The county has proposed a solid waste disposal strategy that calls for a reliance upon a county-owned complex of solid waste facilities (co-composting facility, sanitary landfill, intermediate processing facility, and bulky waste processing facility) to meet the long-term needs of the county. In the interim, the county's strategy calls for continued use of existing facilities within The strategy adopted by the county is and outside the county. consistent with a prior Departmental certification of April 18, 1983, which approved the Burlington County Solid Waste Management Facilities Complex with the exception of the sludge management strategy. The solid waste non-sludge disposal strategy is therefore approved for inclusion within the plan. The sludge management strategy is partly approved (see Section C.1.b. and c. above) and partly rejected (see Section C.2. below). Included within the approved portion is the county's policy on sole source landfills.
- f. Basic Solid Waste Background Data (Page 13): The county has proposed for plan inclusion present and projected quantities of sludge and septage. The data presented within this discussion is approved for inclusion within the plan with the exception of sludge quality values (see Section C.2. below).
- Financing Plan for Solid Waste Facilities (Page 141): The county has proposed for plan inclusion strategies for financing the facilities for processing dewatered sludge (federal grant, state loan or grant, or county bonds), liquid sludge (utilization of existing private facilities), and septage (utilization of existing Mt. Holly Sewerage Treatment Plant). These financing strategies are approved for plan inclusion.
- h. Procedures, Standards and Implementation of Plan (Page 145): The county has proposed for plan inclusion the procedures, standards and implementation mechanisms for adopting amendments to its approved plan. These procedures, as they relate to solid waste (non-sludge) issues, are

consistent with the Solid Waste Management Act and Departmental policies related to solid waste management and are therefore approved for inclusion within the Burlington County District Solid Waste Management Plan. However, it should be noted that the county's plan amendment procedures, as they apply to sludge plan amendments, will be evaluated during development of the Department's sludge management regulations.

- 1. Solid Waste Treatment, Storage and Disposal Facilities (Page 33): The county has proposed for plan inclusion existing and planned facilities for addressing the county's solid waste and sludge management needs. Numerous technical and procedural questions have arisen regarding existing and planned sludge management facilities (status of Rancocas State Park facility, lack of sludge storage specifications, dewatering methods) which are addressed in Section C.2. below. Therefore, only those facilities which are presently accepting or are planned to accept non-sludge solid waste are approved for plan inclusion.
- Transportation and Collection of Sludge and Septage j. (Page The county has proposed for plan inclusion existing and projected collection systems, routes and costs for sludge and septage. The county has, however, not yet completed its routing study indicating specific routes to be utilized by both private and public haulers from all county municipalities transporting dewatered sludge to the co-composting facility. Therefore, the transportation and collection of sludge and septage, with the exception of projected routes and costs of transporting dewatered sludge to the co-composting facility, is approved for plan inclusion. Included within this approval is the county's policy on transfer stations.
- 2. Rejected Portions of the Burlington County Plan Amendment
  - Standardized Form Submission (Entire Plan Amendment): The form of the a. Plan does not comply with the Department's proposed requirements set out in the draft Statewide Sludge Plan. Through the development of the Statewide Sludge Plan, the Department has compiled forms which must be completed and submitted by each district in order to comply with the planning requirements. Use of the forms will ensure uniformity in the planning process and will assist the districts in fully assessing their sludge management needs. Resubmission of the district sludge plan in accordance with the forms to be adopted in the Statewide Sludge Plan should assist the district in remedying various planning deficiencies. It is the Department's policy that the sludge component of the district solid waste management plan must be a discrete unit. non-sludge solid waste planning issues should not be made a part of the district's sludge management plan resubmission. The county is required in Section E. of this certification to resubmit the plan on forms which will be provided by the Department upon adoption of the Statewide Sludge Plan.
  - b. <u>Legal Discussions</u> (Entire Plan Amendment): Throughout the plan amendment the county expresses legal opinions and arguments. Such discussions are inappropriate and are rejected from plan inclusion.

- c. Sludge Quality (Page 31): The county has proposed for plan inclusion a table (Table 1-4) which specifies average and weighted averages of 18 parameters by which to determine sludge quality. Average and weighted average sludge volumes should not be used in determining the suitability of sludge for co-composting. Instead, the sludge quality for each individual treatment plant must be examined. Therefore, Table 1-4 is rejected and must be modified to reflect the sludge suitability of each treatment plant product.
- d. Land Application Facilities (Page 34): The county has proposed for plan inclusion numerous Department permitted land application operations. However, the county has omitted a recently permitted land application site at Rancocas State Park (NJPDES #NJ005435). In addition, all references in the plan to land application "facilities" must be changed to "operations" since land application sites do not meet the Department's definition of a facility. Therefore, this section of the plan is rejected and the required changes must be made.
- e. Sludge Storage Facilities (Pages 47 and 70): The plan lacks a detailed discussion of existing and proposed sludge storage facilities. If the county proposes to use storage as a contingency alternative, the type and capacity of storage facilities must be specified prior to Departmental review and approval.
- f. Co-Composting Operations (Page 62): The county proposes to mix dewatered sludge and municipal solid waste at the planned co-composting facility. Since a variety of dewatering methods are employed at treatment plants throughout the county, solids content of resultant sludges vary. Without homogenization, mixing dewatered sludges with various solids content may cause operational difficulties, as has been the case at other co-composting facilities. Therefore, this aspect of the co-composting facility is rejected and the county should consider a sludge homogenization procedure.
- g. Approximately Sized Storage Tanks (Page 64): The county proposes to install approximately sized emergency storage tanks to receive sludge and/or septage in the event management sites become unavailable. To adequately prepare for such an emergency, the county must project the reserve storage capacity needed and build accordingly. Therefore, this proposed contingency measure is rejected until the county ascertains the needed emergency storage capacity.
- h. Land Application Facilities to Serve Out-of-County Needs (Page 65): The county proposes that it will consider land application sites to serve the needs of out-of-county generators only if the site meets the county siting criteria. However, this siting criteria are inconsistent with NJDEP siting criteria as presented in the Draft Statewide Sludge Management Plan. The Legislature, through the Solid Waste Management Act, has called for maximization of the processing of sludge for fertilizer. It is the Department's policy to set statewide criteria for siting land application sites, which criteria are to be consistent in all counties. Therefore, the county's siting criteria are rejected from incorporation within the plan. Also, the county's stated prerequisites for entering into interdistrict sludge agreements are rejected. The

county, in proposing the agreement prerequisites, failed to acknowledge the Department of Environmental Protection's ultimate control over waste flow with respect to sludge and solid waste.

- i. Sludge Quality (Page 109): The county acknowledges in the plan that some sludges generated within the county do not meet Departmental requirements for land application or co-composting. However, the county does not identify those treatment plants where sludges are not suitable. Therefore, this portion of the plan is rejected and the county must identify those in-county treatment plants that generate sludge which fail to meet the Department's quality requirements.
- j. Emergency Sludge Management Strategy (Page 111): The county has proposed an emergency management procedure when a failure might occur at the co-composting facility. However, the needed storage capacity to accommodate such a failure is not specified. In addition, landfilling is indicated as a short-term emergency back-up. The Department does not consider landfilling as a suitable contingency alternative. Therefore, this emergency strategy is rejected and the county must develop a more specific, non-landfilling, emergency strategy.
- k. Contingency Measures for Disposal of Mt. Holly Sludge (Page 128a.l.iii.): The county has proposed that, during emergencies, sludge generated at the Mt. Holly Wastewater Treatment Plant will be distributed to other in-county sites. The distribution of Mt. Holly Wastewater Treatment Plant sludge is dependent upon sludge quality, which at present is not approvable for this activity. Therefore, this proposed contingency measure is rejected and the county should evaluate other alternatives.
- 1. Contingency Use of Parklands Landfill (Page 128a.l.iv.): The county has proposed the use of the Parklands Landfill in Bordentown Township as a contingency option for the disposal of dewatered sludges generated within the county under emergency conditions. The use of this facility may not be a viable option due to the uncertainty of future solid waste disposal activity at this landfill. Concerning the general use of operational landfills for sludge disposal, it is the Department's policy to permit such use only in very limited circumstances, which must be determined on a case by case basis when the circumstances arise. Accordingly, the county should not plan for the use of operational landfills for sludge disposal and this proposed contingency measure is rejected.
- m. Emergency Siting Criteria and Permitting (Page 129 a.l.iv): The county has proposed the use of emergency land application sites provided they are consistent with the county's siting policies and are issued permits only for the interim period pending operation of the county's co-composting facility. First, the use of any emergency site must be consistent with the NJDEP's siting criteria. Secondly, emergency permits are issued for 6 month intervals only, and only after the Department makes an emergency determination. Holders of emergency permits are required to obtain final permits in order to continue operations after the six (6) month period. Finally, "emergency land application sites" should be referred to as "contingency sites" in

future submissions. Therefore, the county must comply with NJDEP siting criteria in identifying contingency sites and apply for interim and final permits as appropriate and the county's proposed emergency siting and permitting policies are rejected.

- n. Secondary Sludge Disposal Use of Burlington County Landfill (Pages 133-136, Table 5.1): The county, in Table 5.1, has proposed the secondary use of the Burlington County Landfill for sludge disposal in the event that designated primary treatment facilities are unavailable. The use of landfills for sludge disposal is contrary to Departmental policy as indicated in items j. and l. above. Acceptable secondary alternatives must have sufficient capacity to handle all the sludge managed at the co-composting facility. Therefore, additional sources of secondary management must be identified and the proposed use of the Burlington County Landfill for secondary disposal is rejected.
- Specific Standards Applicable to Land Application Facilities 171-179): Section 7.9.9. of the county's proposed Sludge and Septage Management Plan proposes standards for the siting of all new land application sites and expansions to existing facilties. The standards address such criteria as soil permeability, depth to groundwater and The county's criteria are not consistent with the percent slope. Department's standards for land application sites as set forth in the Department's regulations and the draft Statewide Sludge Plan. Since the Department is seeking the establishment of uniform statewide siting criteria, the county's proposal must be rejected at this time. Such individual criteria may be considered as part of subsequent county submissions once statewide criteria are in place. However, at this time, all references to the use of the county's siting criteria are rejected from plan inclusion. Any substantive input on proposed statewide siting criteria should be made by the county in the form of comments to the draft Statewide Sludge Management Plan.
- Exclusion of Out-of-County Sludge (Page 128a.1): The county proposed, under emergency conditions, to exclude all sludge generated outside of the county from management at existing land application sites within Burlington County. The Solid Waste Management Act directs districts to maximize the processing of sludge for the production of energy, fertilizer or other useful materials. The county's proposal to direct sludges which are generated from outside Burlington County away from land application operations in the county in the event of a county determined emergency would frustrate the intent of the Solid Waste Management Act by discouraging out-of-county sludge generators from entering into contracts with Burlington County land application operations. Since these contracts would be terminated upon county determination of an emergency, out-of-county generators would not be guaranteed sludge management for the full term of the contract. addition, such redirection merely shifts the sludge management problem rather than contributing to a solution. Therefore, this proposed contingency measure is rejected and the county should evaluate other alternatives for the management of out-of-county sludge in emergency situations.

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q. Land Application Facility Rate of Return (Page 137, #2): The county has proposed the management of its estimated 2,000,000 gallons per year of liquid sludge at two existing land application facilities within Burlington County. Further, the county anticipates that an equal split of this volume will bring an adequate flow of sludge to assure a reasonable rate of return to the operators. Rate of return considerations are only applicable to Board of Public Utilities regulated facilities, and not to land application operations. Therefore, monetary rate of return for the two existing land application operations is not applicable and this section of the plan is rejected.

# 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 Burlington County District Solid Waste Management 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 of Environmental Protection and operating pursuant to a contract as herein described, shall be deemed to be in violation of this amendment and of the Burlington County District Solid Waste Management 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 of Environmental Protection, and for good cause shown, obtain an extension of time to complete such renegotiation.

#### 2. Compliance

# A. Compliance with Burlington County Plan Amendment

All solid waste facility operators and collector/haulers registered with the Department of Environmental Protection and operating within Burlington County and affected by the amendment contained herein shall operate in compliance with this amendment and all other approved provisions of the Burlington County District Solid Waste Management Plan. Any facility operator or collector/hauler 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 of Environmental Protection and shall be subject to the provisions and penalties of N.J.S.A. 13:1E-9, 12 and all other applicable laws.

### B. Compliance with Statewide Sludge Management Plan

The Department's review of this district amendment has been guided by the draft of the Statewide Sludge Management Plan which has not been finalized. Pursuant to N.J.S.A. 13:1E-20a(1), the amendment is subject to further review, including modification or rejection, at any time.

The Department shall exercise this authority upon adoption of the Statewide Sludge Management Plan and may, thereby, identify additional issues which may be cause for modification or rejection in whole or in part.

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

The provisions of the Burlington County District Solid Waste Management Plan and Sludge Management Plan component shall apply to all solid wastes defined in N.J.S.A. 13:1E-3 and N.J.A.C. 7:26-2.13 and shall apply to sewage sludge and septage. It shall not apply to liquid wastes and hazardous wastes. Also, all non-hazardous materials separated at the point of generation for sale or reuse are excluded from the waste flows designated in the Interdistrict and Intradistrict Solid Waste Flow Rules (N.J.A.C. 7:26-6).

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

This document shall serve as the certification of the Commissioner of the Department of Environmental Protection to the Burlington County Board of Chosen Freeholders and pursuant to N.J.S.A. 13:1E-24c. and f., the county shall proceed with the implementation of the approved portions of the amendment contained 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 N.J.A.C. 7:26-1.4 and N.J.A.C. 7:26-2.13 and the draft Statewide Sludge Management Plan.

#### 6. Effective Date of Amendment

The approved portions of the amendment to the Burlington County District Solid Waste Management Plan contained herein shall take effect immediately.

#### Reservation of Authority

Nothing contained herein shall be construed as a limitation on any other action taken by the Department of Environmental Protection pursuant to its authority under the law. The Burlington County District Solid Waste Management Plan, including any amendment made thereto, shall conform with the Statewide Solid Waste Management Plan and Statewide Sludge Management Plan. The Department has published a final Statewide Solid Waste Management Plan and a draft Statewide Sludge Management Plan with appendices which include the Department's planning guidelines and rules, regulations, and orders of the Department, including the 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 in Part and Rejection in Part of the Amendment 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 in part and reject in part the amendment as outlined in Section C. of this certification, to the Burlington County District Solid Waste Management Plan which was adopted by the Burlington County Board of Chosen Freeholders on August 13, 1986. I further direct the Burlington County Board of Chosen Freeholders to remedy the deficiencies enumerated in Section C. of this certification by resubmitting its Burlington County Sludge and Septage Management Plan on forms which will be provided by the Department upon adoption of the Statewide Sludge Management Plan.

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RICHARD T. DEWLING

COMMISSIONER

DEPARTMENT OF ENVIRONMENTAL PROTECTION