
Solid Waste Management Plan Amendment

Site 6-1B for Resource Recovery

November 1985

Certified by NJDEP on:
3/25/86



State of New Jersey
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 OFFICE OF THE 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)
 (MORRIS COUNTY SOLID WASTE)
 (MANAGEMENT DISTRICT)

CERTIFICATION
 OF THE DECEMBER 11, 1985
 AMENDMENT TO THE MORRIS 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 January 29, 1981 the Department approved, with modifications, the Morris 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 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 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 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 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.)

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 Morris County Board of Chosen Freeholders completed such a review and on December 11, 1985, adopted an amendment to its approved district solid waste management plan. The amendment designates Site 6-1B, Rockaway Township, as the site for a 1000 ton-per day resource recovery facility.

The amendment was received by the Department of Environmental Protection on December 18, 1985 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 Morris County District Solid Waste Management Plan, and has determined that the amendment adopted by the Morris County Board of Chosen Freeholders on December 11, 1985 is approved as provided in N.J.S.A. 13:1E-24. With regard to the district plan, while the requirements of the Act concerning the report have been met, the district's plan remains deficient in certain important ways.

B. Findings and Conclusions with Respect to the Morris 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 December 11, 1985, amendment to the Morris County District Solid Waste Management 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 is fully consistent with the Statewide Solid Waste Management Plan.

In addition, the Division of Waste Management circulated the plan amendment to sixteen 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 Parks and Forestry and Coastal Resources; the State Departments of Agriculture and Community Affairs; the Board of Public Utilities, the Office of Recycling and the New Jersey Turnpike Authority. The following agencies failed to respond to our requests for comments: the State Department of the Public Advocate; the New Jersey Advisory Council on Solid Waste Management and the U.S. Environmental Protection Agency. The State Departments of Health and Transportation; the N.J.D.E.P. Divisions of Environmental Quality, Water Resources and Fish, Game and Wildlife; and the Green Acres Program submitted substantive comments which are further addressed below.

The Division of Fish, Game and Wildlife commented that the site is considered to be of high value relative to fish and wildlife resources/habitat. They are concerned that the quality and quantity of category 1-trout production waters will be maintained in an ambient state and how impacts to fish/wildlife and their habitats will be avoided, minimized or mitigated at Site 6-1B. Additional environmental concerns include: cooling water intake design (protection of fish from impingement/entrainment if surface waters are utilized); and minimization of thermal discharge impacts to surface water. The Department response is that the development of this facility or any other construction on this site will have some impact on the surrounding natural environment. However, close

adherence to Department regulations governing the construction and operation of a resource recovery facility will minimize or eliminate potential negative impacts. Those specific concerns identified above will be addressed in detail within the Environmental Impact Statement and the engineering design for the resource recovery facility.

The N. J. Department of Transportation requested specific information concerning the location of access routes to the resource recovery facility, and traffic data showing predicted increases in the numbers of truck trips on nearby Interstate 80 and state highways during construction and operation. Additionally, DOT sought more information regarding the relationship of the proposed resource recovery facility to a pumped storage hydroelectric project also proposed for the Mount Hope Lake area. The Department reply is that traffic during road construction and facility operation, as well as the potential joint impact of the proposed pumped storage project with the proposed landfill and resource recovery facilities will be evaluated in the EIS process.

The Division of Water Resources noted that Location 8, Site 6-1B, provisionally designated as the location for the resource recovery plant, is just inside the proposed landfill boundaries. They stress that the nature of the site, i.e. wetlands, fault, mine workings and sole source aquifer recharge areas have already limited the size of the landfill. They also commented that construction of the resource recovery facility at that location further reduces the landfill size. Also, necessary permits and approvals must be obtained if washdown and/or scrubber waters are to be discharged into surface or ground waters or public sewer system. The Department reply is that the interrelationship of the resource recovery facility and landfill will have to be evaluated when the detailed engineering designs are submitted.

The Department of Health (DOH) is concerned that the access road which is presently indicated as the truck route to the facilities should not be used by recreational traffic to Lake Ames. They also advocated that an alternate truck route to the presently proposed one through Hibernia should be determined. DOH recommended that background levels of community soil, air and water be determined before the site is used to establish standard parameters, with annual sampling conducted following plant operation. Additionally, they are suggesting continuous public participation at all phases of planning and implementation, together with a comprehensive worker and community safety program. The Department response is that truck routing to avoid conflict with recreational areas and minimize traffic impacts, together with necessary safety programs will be addressed in the environmental impact statement submission. All required testing and environmental controls for soil, water and air contaminants will be rigorously addressed in the permit conditions should a permit be warranted. Public hearings to ensure opportunities for full citizen participation are mandated at both the plan amendment and facility engineering permit phases of the Department's review process.

The Division of Environmental Quality (DEQ) pointed out that a federal Prevention of Significant Deterioration (PSD) permit will be required. Air quality simulation modeling will be needed to determine the effect of the proposed facility on ambient air quality. A year of on-site meteorological data may be required for the modeling because of the surrounding terrain. DEQ further noted that the operation for the facility must not cause a violation of

the National Ambient Air Quality Standards, exacerbate an existing violation or promote significant deterioration of existing clean air: the entire state of New Jersey is a non-attainment area for ozone. They further maintain that the facility traffic impact on the ambient air quality also will have to be determined. The Department response is that the potential impact on local and regional air quality due to stack emissions will be mitigated by state-of-the art environmental controls to ensure compliance with applicable air quality standards. Additional air quality screening models will be used to determine the relative impacts on the existing air quality at the potential resource recovery location. Relevant air quality issues will also have to be addressed in an Environmental Impact Statement submission.

Green Acres stressed the need for recycling as well as incineration of solid waste. The Department response is that a previous Morris County Plan amendment incorporated mandatory municipal recycling with source separation of four recyclables into the district plan. Sixteen of the county's 39 municipalities are reportedly in compliance with the county's mandate at this time.

C. Certification of Morris County District Solid Waste Management Plan Amendment

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 December 11, 1985 amendment to the approved Morris County District Solid Waste Management Plan and certify to the Morris County Board of Chosen Freeholders that the December 11, 1985 amendment is approved as further specified below.

The designation of Site 6-1B, Location 8, Block 229, Lot 10 and Lot 10-2 in Rockaway Township, Morris County, for the development of a 1000 ton per day resource recovery facility is approved. The construction or operation of any solid waste facility shall be preceded by the acquisition of all necessary permits and approvals under N.J.S.A. 13:1E-1 et seq. and all other applicable laws. The issuance of construction and/or operating permits pursuant to the Solid Waste Management Act is limited to those applicants found by the Department to be fit and competent to manage such facilities.

This same site referred above, 6-1B, has also been selected by a prior amendment as the location for construction of a sanitary landfill. Essentially, the comments and issues raised by the review agencies concerning the development of a resource recovery facility on this site are the same that were voiced for the development of a landfill. The relationship between the resource recovery and landfill facilities is exemplified by the November, 1985 resolution passed by the Morris County Solid Waste Advisory Council, indicating that a resource recovery facility should be sited at 6-1B, only if the landfill were also to be constructed on the same site.

However, a January, 1985 Administrative Consent Order entered between Morris County and the Department contained detailed schedules to assure the development of an in-county landfill by March, 1986 and a resource recovery facility to be

operational by November, 1990. As of February, 1986, the county had failed to develop a landfill and had not acquired the site property. Furthermore, pending federal legislation containing specific language prohibiting the construction of a landfill on this site could disqualify the 6-1B property for any intended landfill development. Even if the landfill is blocked by legislation, litigation or other means, the designated resource recovery site shall be developed by the county according to the milestones and schedule in the Administrative Consent Order, unless and until the county adopts a plan amendment deleting the resource recovery site and the Department approves the plan amendment.

The Department has reviewed the entire Morris County District Solid Waste Management Plan, including this amendment, to determine whether the plan fulfills the requirements set forth in N.J.S.A. 13:1E-21. The result of that review is as follows:

1. N.J.S.A. 13:1E-21b(2) requires a statement of the solid waste disposal strategy to be applied . . . which strategy shall include the maximum practicable use of resource recovery procedures and a plan for using terminated landfill disposal sites . . . in the Solid Waste Management District.

Although the county has proposed a general terminated landfill policy, the county plan still does not offer a specific plan for using each terminated landfill in the county as required by the Act. Therefore, the Morris County Plan remains deficient with respect to N.J.S.A. 13:1E-21b(2).

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

Morris County has submitted an estimate of annual transportation and disposal costs at the proposed resource recovery facility and a collection/haul analysis based on proposed waste flows to this facility. Therefore, I find that the county plan is in compliance with N.J.S.A. 13:1E-21b (4).

3. N.J.S.A. 13:1E-21b(5) requires procedures for coordinating all activities related to the collection and disposal . . . within the Solid Waste Management District, which procedures shall include the agreements entered into as provided herein between the Board of Chosen Freeholders . . . and every such person, and the procedures for furnishing the solid waste facilities contained in the Solid Waste Management Plan.

Although Morris County exports all of its waste to out-of-county sites, there are no formal interdistrict agreements or contractual arrangements. Therefore, the Morris County Solid Waste Management Plan is deficient with respect to the requirements of N.J.S.A. 13:1E-21b(5).

4. 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.

Morris County has not submitted to the DEP a specific plan for financing solid waste management within the district. Therefore, Morris County has not complied with N.J.S.A. 13:1E-21b(6) and this section of the Morris County District Solid Waste Management Plan is deficient.

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 Morris 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 Morris 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

All solid waste facility operators and collector/haulers registered with the Department of Environmental Protection and operating within Morris County and affected by the amendment contained herein shall operate in compliance with this amendment and all other approved provisions of the Morris 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, 10, and 12 and all other applicable laws.

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

The provisions of the Morris County District Solid Waste Management 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 and shall not apply to liquid wastes, sewage sludge, septage, 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 Morris 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 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 -2.13.

6. Effective Date of Amendment

The approved amendment to the Morris County District Solid Waste Management 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 of Environmental Protection pursuant to its authority under the law. The Morris County District Solid Waste Management 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 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 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 as outlined in Section C. of this certification, to the Morris County District Solid Waste Management Plan which was adopted by the Morris County Board of Chosen Freeholders on December 11, 1985 and further direct the Morris County Board of Chosen Freeholders to remedy those deficiencies outlined in Section C. of this certification as soon as possible.

DATE

3/25/86


RICHARD T. DEWLING
COMMISSIONER

DEPARTMENT OF ENVIRONMENTAL PROTECTION

MORRIS COUNTY
SOLID WASTE MANAGEMENT PLAN AMENDMENT

NOVEMBER, 1985

Prepared for:

MORRIS COUNTY BOARD OF CHOSEN FREEHOLDERS
MORRIS COUNTY SOLID WASTE ADVISORY COUNCIL

Prepared by:

MORRIS COUNTY SOLID WASTE MANAGEMENT STAFF

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AMENDMENT

MORRIS COUNTY SOLID WASTE MANAGEMENT PLAN

NOVEMBER, 1985

I. INTRODUCTION

This Solid Waste Management Plan has been prepared to amend the May, 1985 Morris County Solid Waste Management Plan Update approved by the New Jersey Department of Environmental Protection on August 19, 1985.

The May 1985 Plan Update included a recommendation for a multi-faceted solid waste management strategy incorporating resource recovery in the form of maximum recycling and development of a waste-to-energy facility, and landfilling. The waste-to-energy component of this plan designated development of a single waterwall incinerator for waste volume reduction and energy production for the County's long-term waste disposal needs.

This proposed plan amendment outlines the project background, project description and its consistency with the County's approved Solid Waste Management Plan. The location of the proposed facility is identified in this Plan Amendment.

II. PROJECT BACKGROUND

In January, 1985 the Morris County Board of Chosen Freeholders entered into an Administrative Consent Order with NJDEP. Included in this order were time schedules for implementation of both an in-county sanitary landfill and an in-county waste-to-energy facility.

The waste-to-energy schedule designates November 1, 1990 for commencement of operation. All of Morris County's processable waste will be directed to the facility. All non-processable waste and bottom ash residue generated from the waste-to-energy facility will be disposed of at the Morris County Sanitary Landfill, if permissible.

The Board of Chosen Freeholders contracted with Bechtel Civil and Minerals, Inc. in 1983 to investigate eight potential waste-to-energy facility sites. Based upon the consultant's evaluation, they concluded that of the nominated sites, Site 8 in Montville Township was the most suitable location for a waste-to-energy facility.

In 1985, Bechtel evaluated two additional sites (Jefferson Twp./Hopatcong Boro, Jefferson Twp./Rockaway Twp.) together with the Montville site as potential locations for the resource recovery project. All three sites were ultimately determined to be suitable. The Hopatcong site, located in Sussex County, was determined to be the most suitable.

After selection of Site 6-1B in Rockaway Township for the County's state-of-the-art landfill, the Board of Freeholders again contracted with Bechtel to investigate Site 6-1B for development of Morris County's waste-to-energy facility. Construction of the facility on this site would minimize adverse transportation impacts and minimize transportation costs for hauling non-processable wastes and ash residues to the landfill.

III. PROJECT DESCRIPTION

Morris County's waste-to-energy facility is planned to be a waterwall incinerator designed to process up to 1000 tons per day of the County's processable waste. The design will constitute all state-of-the-art equipment and technologies.

In general, a waterwall incinerator consists of three major processing areas: the refuse dumping and feed area, the incineration and steam production systems, and the emission control units.

Vehicles enter the facility at the tipping area and deposit waste into a refuse storage pit. The waste is then lifted by an overhead crane and fed into a charging chute which distributes a uniform quantity of waste over moving grates.

The grates travel through the boiler which is composed of water filled walls which produce steam as the refuse is burned. All emissions are then carried through air pollution control systems before being discharged into the atmosphere.

An extensive control system monitors and maintains accurate firing, —controlled air flow and consistent temperature throughout the processing of the waste from the solid through the gas phases.

Bottom ash residues collected from the grates and fly ash collected from the emission control system are disposed of in a landfill.

The steam which is generated by the combustion process can be used directly by a steam user or it can be used to generate electricity to be sold to the utility company.

IV. SITE DESCRIPTION

Site 6-1B is located in the Township of Rockaway (Figure 1). The 1754 acre site is bounded on the west by Picatinny Arsenal, on the north by Snake Hill Road, on the east by a high ridge and on the south by Mount Hope Road and Mill Pond Road. Mount Hope Lake (Mount Hope Mine Hill Pond) occupies the southeastern part of the site (Figure 2).

IV.a Existing Land Use

The southern portion of site 6-1B is occupied by Mount Hope Lake. Adjacent to the lake are mine support facilities of the Mount Hope Iron Mine, owned by Halecrest Company. The mines have been idle since 1978.

A currently active rock quarry, owned by Mount Hope Rock Products, is located northwest of the Halecrest Facilities. Mount Hope Rock products owns its quarry equipment and leases its buildings from Halecrest.

The area northeast of the mining and quarry areas is predominantly vacant, wooded land. A Jersey Central Power and Light transmission line and right of way traverses the site in a southwest to northeast direction.

Figure 1.
Site 6-1B, Rockaway Township

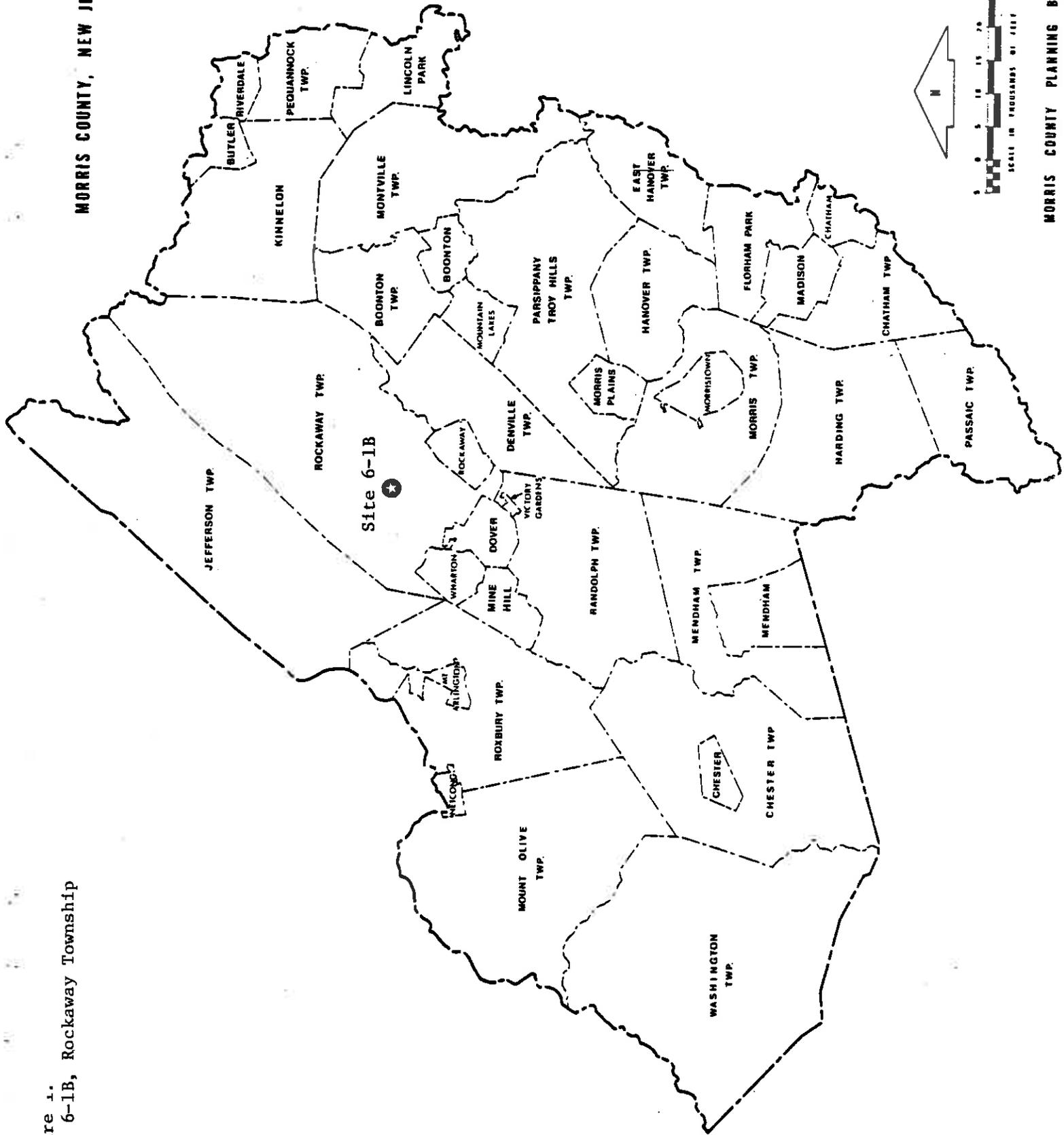
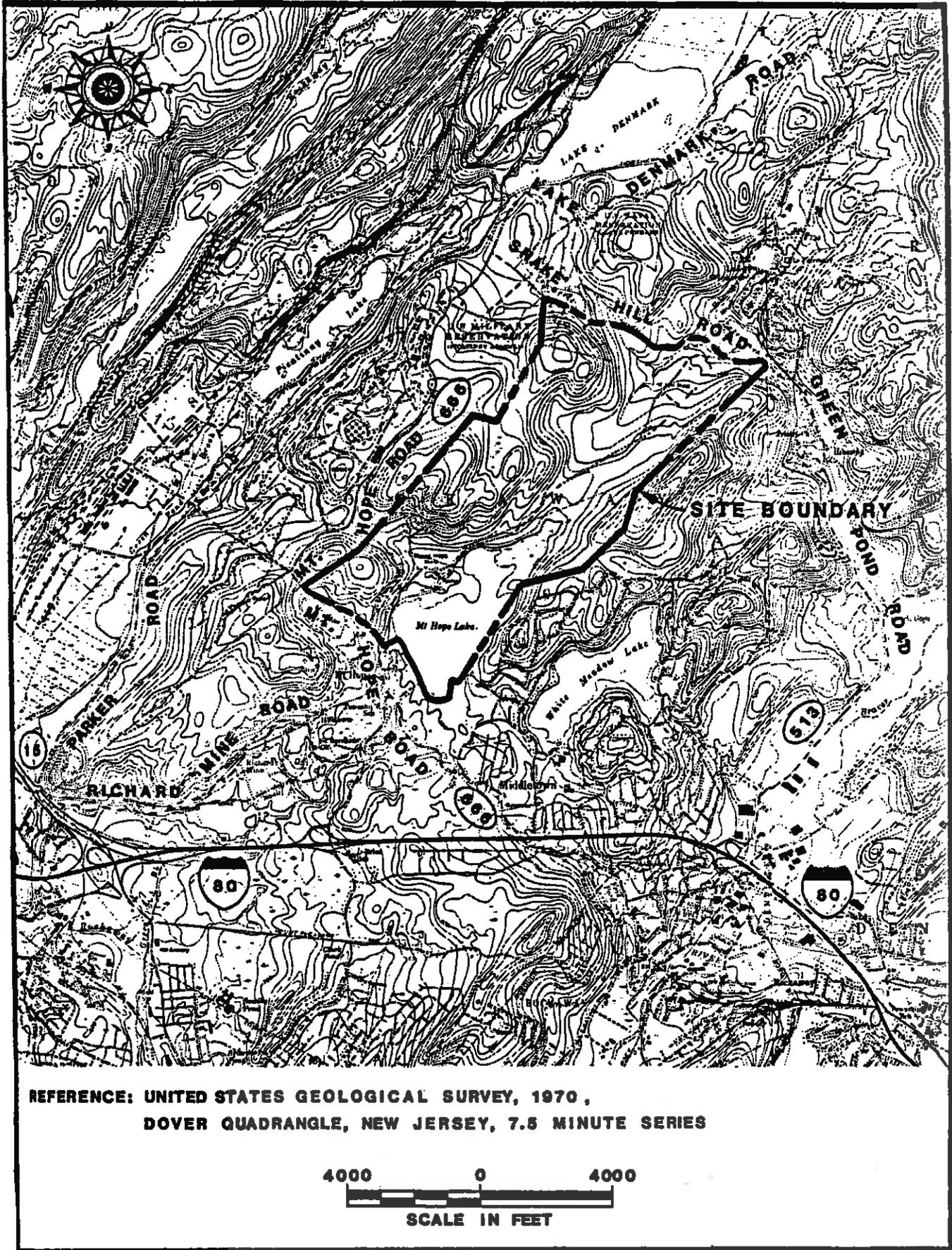


Figure 2.
Site 6-1B Location



IV.b Planned On-Site Land Use

Site 6-1B is under consideration for several future uses.

As mentioned earlier, this site has been selected for development of the Morris County Landfill. The proposed landfill areas are located in the northeastern portion of the site (Figure 3).

A portion of site 6-1B has also been designated for the proposed Mount Hope Pumped Storage Hydroelectric Project. This project would utilize the waters of Mount Hope Lake and involve enlargement of the lake from its present size by the construction of an 8,000 foot long dam. Development of the Pumped Storage Facility on this site should not interfere with development of the waste-to-energy facility.

IV.c Facility Location

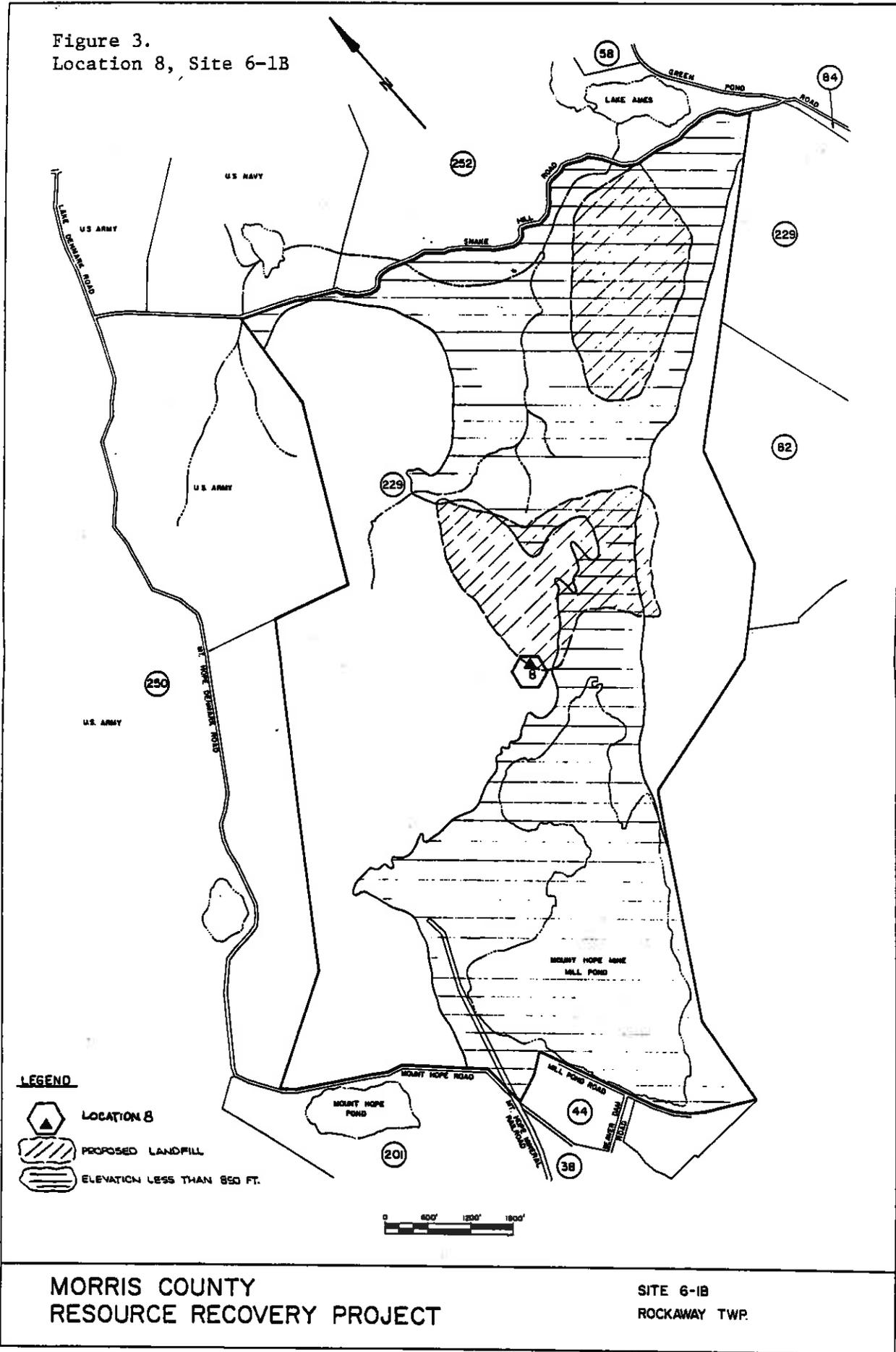
A full-site investigation was conducted by Bechtel Civil and Minerals, Inc. to determine if a suitable site existed for the waste-to-energy facility.

Environmental, socio-economic and engineering parameters were investigated and considered during the screening process. The site screening eliminated areas on the site that could have a significant air quality impact, were located adjacent to trout streams, or were located in the proposed landfill area.

The area ultimately selected, known as Location 8, straddles the boundary of two properties (Block 229, Lot 10 - Mt. Hope Mining Co.; and Block 229, Lot 10-2 - Mt. Hope Rock Products). This area surpasses air quality requirements and is not adjacent to a trout stream (Figure 3). Although Location 8 is just inside a portion of the proposed landfill area, the designated landfill areas are still preliminary. If necessary, a slight modification of the landfill design will accommodate the waste-to-energy facility.

Detailed information on Location 8 is presented in Bechtel's report and entitled Implementation of Resource Recovery Facility, Task IV - Facility Site Evaluation, Site 6-1B.

Figure 3.
Location 8, Site 6-1B



MORRIS COUNTY
RESOURCE RECOVERY PROJECT

SITE 6-1B
ROCKAWAY TWP.

V. PROJECT IMPACTS

The reduction of municipal waste, coupled with the production of a stable renewable source of energy will contribute significantly to the social, economic and environmental benefits for the County.

Va. Social Impact

The residents of Morris County will benefit from the waste-to-energy facility through its provision for the County's long-term waste disposal needs. Construction, operation and maintenance of the facility will also create new employment opportunities for County residents.

Vb. Economic Impact

The short-term economic impact of the waste-to-energy facility may be, in part, a negative one in that municipalities may initially have to pay a higher tipping fee than will be charged at the Morris County Landfill.

Over time, however, the facility will have a positive economic impact as tipping fees stabilize with the accumulation of energy revenues. Landfill tipping fees, on the other hand, can be expected to increase with increasing costs of state-of-the-art environmental controls.

Table 1 presents an estimate of annual transport and disposal costs for the facility in 1990. Table 2 presents a collection/haul analysis based on proposed waste flows to the facility. It should be noted that Mount Arlington, which presently operates a municipal landfill, has been included in this re-direction.

Access to the facility is expected to occur along the proposed landfill access road.

Numerous other economic benefits will be achieved including the following: minimized cost of transporting ash residues to the Morris County landfill, located at the same site; extension of landfill capacity; host community benefits; and energy generation.

Table 1.

ESTIMATED TOTAL ANNUAL TRANSPORTATION
AND DISPOSAL COSTS
Morris County, 1990

MUNICIPALITY	TRANSPORT ¹	DISPOSAL ²	TOTAL
BOONTON	\$ 55,380.	\$ 303,320	\$ 358,700
BOONTON TWP.	27,300.	149,880	177,180
BUTLER	77,550.	251,000	328,550
CHATHAM	86,570	280,280	366,850
CHATHAM TWP.	78,210.	253,080	331,290
CHESTER	26,160.	77,600	103,760
CHESTER TWP.	57,360	170,240	227,600
DENVILLE	53,760	546,760	600,520
DOVER	71,320	634,880	706,200
EAST HANOVER	146,970	581,400	728,370
FLORHAM PARK	208,950	708,480.	917,430
HANOVER	152,555	835,520	988,075
HARDING	28,500	102,800	131,300
JEFFERSON	109,800.	434,360	544,160
KINNELON	61,740	209,200	270,940
LINCOLN PARK	73,720	276,400	350,120
MADISON	133,500	475,320	608,820
MENDHAM	54,480	161,800	216,280
MENDHAM TWP.	37,730	122,240	159,970
MINE HILL	10,300	73,280	83,580
MONTVILLE	136,595	572,160	708,755
MORRIS PLAINS	74,250	480,560	554,810
MORRISTOWN	299,710	1,255,160	1,554,870
MORRIS TWP.	144,245	604,040	748,285
MOUNTAIN LAKES	10,990	111,840	122,830
MT. ARLINGTON	16,940	109,800	126,740
MT. OLIVE	153,995	577,040	731,035
NETCONG	26,550	126,000	152,550
PAR-TROY	303,820	1,966,560	2,270,380
PASSAIC	85,960	218,440	304,400
PEQUANNOCK	131,670	426,280.	557,950
RANDOLPH	87,700	624,320	712,020
RIVERDALE	31,920	94,680	126,600
ROCKAWAY	18,700	266,320	285,020
ROCKAWAY TWP.	52,150	742,520	794,670
ROXBURY	123,305	675,440.	798,745
VICTORY GARDENS	2,345	23,960	26,305
WASHINGTON	146,580	372,720	519,300
WHARTON	27,675	219,000	246,675
TOTAL	\$ 3,426,955	\$ 16,114,680	\$ 19,541,635
	Avg. -\$8.50/ton	Avg-\$40.00/ton	Avg-\$48.50/ton

¹Transport cost based on round trip mileage x 2.50/mi. x # of trucks

²Disposal cost projected @ \$40.00 per ton @ waste-to-energy facility

Table 2.

COLLECTION/HAUL ANALYSIS

(Based on Proposed Waste Flows)

Municipality	Morris County Waste-To-Energy Disposal Facility	Distance (one way) (miles)	Primary Route(s)	Utilization of Transfer Station (No) or (Name of Facility)
Boonton Town	"	13	I-287, I-80, MC513	No
Boonton Township	"	14	I-287, I-80, MC513	"
Butler Boro	"	22	MC511, I-287, I-80, MC513	"
Chatham Boro	"	22	NJ24, I-287, I-80, MC513	"
Chatham Township	"	22	MC647, NJ24, I-287, I-80, MC513	"
Chester Boro	"	24	US206, I-80, MC513	"
Chester Township	"	24	NJ24, US206, I-80, MC513	"
Denville Township	"	7	I-80, MC513	"
Dover Town	"	8	US46, MC513	"
East Hanover Township	"	18	MC632, I-80, MC513	"
Florham Park Boro	"	21	MC510, I-287, I-80, MC513	"
Hanover Township	"	13	NJ10, I-287, I-80, MC513	"
Harding Township	"	20	MC663, I-287, I-80, MC513	"
Jefferson Township	"	18	MC699, NJ15, I-80, MC513	"
Kinnelon Boro	"	21	MC618, I-287, I-80, MC513	"
Lincoln Park Boro	"	19	US202, I-287, I-80, MC513	"
Madison Boro	"	20	NJ24, I-287, I-80, MC513	"
Mendham Boro	"	24	NJ24, I-287, I-80, MC513	"
Mendham Township	"	22	NJ24, I-287, I-80, MC513	"
Mine Hill Township	"	10	US46, MC513	"
Montville Township	"	17	I-287, I-80, MC513	"
Morris Plains Boro	"	11	NJ53, I-80, MC513	"

Table 4 (cont'd)

COLLECTION HAUL ANALYSIS

(Based on Proposed Waste Flows)

Municipality	Morris County Waste-To-Energy Disposal Facility	Distance (one way) (miles)	Primary Route(s)	Utilization of Transfer Station (No) or (Name of Facility)
Morris Township	"	17	I-287, I-80, MC513	No
Morristown Town	"	17	I-287, I-80, MC513	"
Mount Olive Township	"	19	US46, I-80, MC513	"
Mountain Lakes Boro	"	7	US46, I-80, MC513	"
Netcong Boro	"	15	I-80, MC513	"
Par-Troy Township	"	11	I-287, I-80, MC513	"
Passaic Township	"	28	MC604, MC663, I-287, I-80, MC513	"
Pequannock Township	"	22	MC511, US202, I-287, I-80, MC513	"
Randolph Township	"	10	NJ10, MC513	"
Riverdale Boro	"	24	MC511, US202, I-287, I-80, MC513	"
Rockaway Boro	"	5	US46, MC513	"
Rockaway Township	"	5	MC513	"
Roxbury Township	"	13	I-80, MC513	"
Victory Gardens Boro	"	7	MC513	"
Washington Township	"	28	NJ24, US206, I-80, MC513	"
Wharton Boro	"	9	I-80, MC513	"
Mt. Arlington Boro	"	13	MC615, I-80, MC513	"

Vc. Environmental Impact

Positive environmental impacts will result from the development of a waste-to-energy facility.

Although the Morris County Landfill represents the state-of-the-art in landfill design and operation, processing of waste in a waste-to-energy system is considered the state-of-the-art in overall solid waste management.

In addition, many materials which can pose potential environmental hazards when landfilled are rendered harmless through proper incineration.

VI. PROJECT IMPLEMENTATION ACTIVITIES

After approval of this Solid Waste Management Plan Amendment by NJDEP, activities for implementation of the waste-to-energy facility will include:

- Issuance of the Request for Qualifications, Request for Proposals and selection of a full service contractor to design, construct and operate the facility.
- Completion of an environmental impact statement and a geotechnical investigation of Location 8 in accordance with NJDEP guidelines.
- Development of a plan to finance the facility which will include designation of ownership and selection of bonding options.
- Submittal of the facility engineering report.
- Acquisition of the site by the County.
- Securing of a contract with an energy market which will purchase the stream or electricity generated by the facility.
- Designation of the County as a waste franchise to assure adequate waste flow to the facility.

- Application and approval of full environmental permits.
- Construction, start-up and operation.

Commencement of the operation of Morris County's waste-to-energy facility is expected in late 1990 to early 1991.

This proposed plan amendment is in conformance with the approved Morris County Solid Waste Management Plan by providing for the disposal of solid waste generated within the County.

To insure the broadest possible participation by the general public in this Plan Amendment process, the Morris County Board of Chosen Freeholders will conduct a public hearing. All County residents, public officials or organizations interested in this action are encouraged to attend and offer testimony.

Inquiries and written comments or questions concerning this proposal Plan Amendment may be addressed to:

Morris County Board of Chosen Freeholders
Courthouse
Morristown, New Jersey 07960

OR

Morris County Planning Board
Courthouse
Morristown, New Jersey 07960
Attention: Glenn W. Schweizer, Solid Waste Coordinator