AMENDMENT #1

TO THE CUMBERLAND COUNTY

SOLID WASTE MANAGEMENT PLAN

JULY 1983

PREPARED BY THE

CUMBERLAND COUNTY IMPROVEMENT AUTHORITY

with assistance from

SHEAFFER & ROLAND, INC.
130 North Franklin Street
Chicago, Illinois 60606

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Introduction

This report amends and updates the Cumberland County Solid Waste Management Plan (1979), as modified in December 1980 and March 1981. It incorporates data presented in the Solid Waste Resource Recovery Study (1981) and subsequent information prepared for the Cumberland County Improvement Authority (CCIA). The report contains the following sections:

1. Synopsis of Current Plan to be Amended
2. Status of the Site Selection Process
3. Status of Source Separation Efforts
4. Rationale for the Amendments
5. The Interim Plan
6. The Selected Site
7. Amendments

Synopsis of the Current Plan to be Amended

The currently approved plan is spelled out in the Cumberland County Solid Waste Management Plan (December 1979), in the Modifications to 1979 Solid Waste Management Plan (December 1980) and in a Certification of Approval with Modifications of the Cumberland County District Solid Waste Management Plan (March 1981). Figures 1 through 3, reprinted from the second report, but as later amended, summarize the ten-year plan (1980 through 1990) for solid waste management in Cumberland County by municipality, disposal site, and type of waste. Also see Table 1.

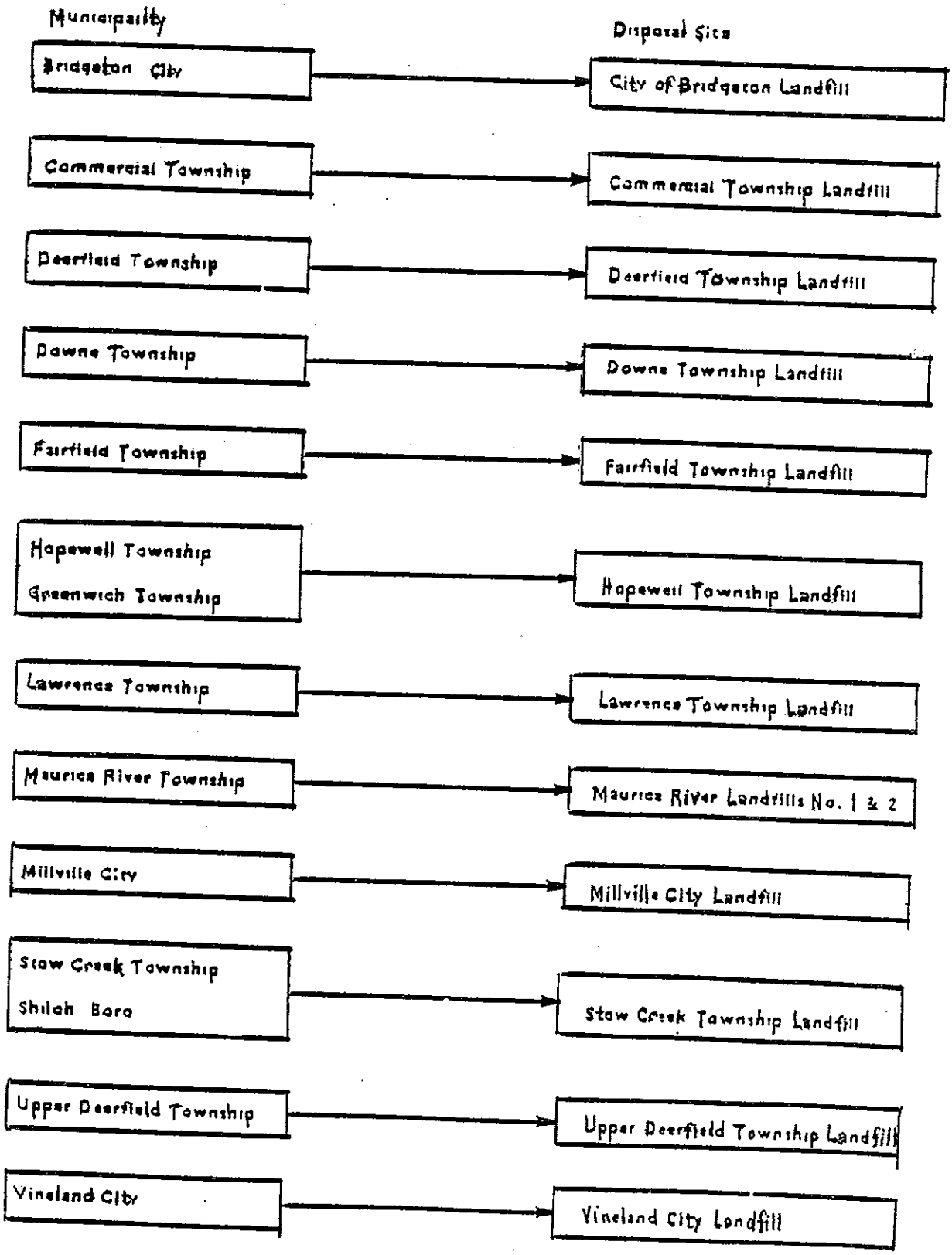
The modified plan calls for opening a new landfill to serve the western municipalities and a second new landfill to serve the eastern municipalities, both to be operational by 1983. The plan specifies that existing municipal landfills will be used for the period 1980 through 1982 and that all municipalities would be served by one of the new landfills after that period. All of the existing municipal landfills would be phased out of operation, beginning in 1983.

These amendments document an interim plan for managing solid waste in the County until December 1984 or until the opening of a new County-wide landfill. As described in the following sections, this interim plan reflects changes in conditions during the period 1980 through 1982. There are seven basic amendments to the currently approved plan brought about by the changed conditions. These amendments deal with the selection of one County-wide landfill rather than two, with the designation of that landfill, and with the alteration of the implementation schedule.

FIGURE 1

MUNICIPAL WASTE - TYPE 10

1980 - 1982 WASTE FLOW



[illegible]

[illegible]

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

FIGURE 2

MUNICIPAL WASTE - TYPE 10
1983 - 1990 WASTE FLOW

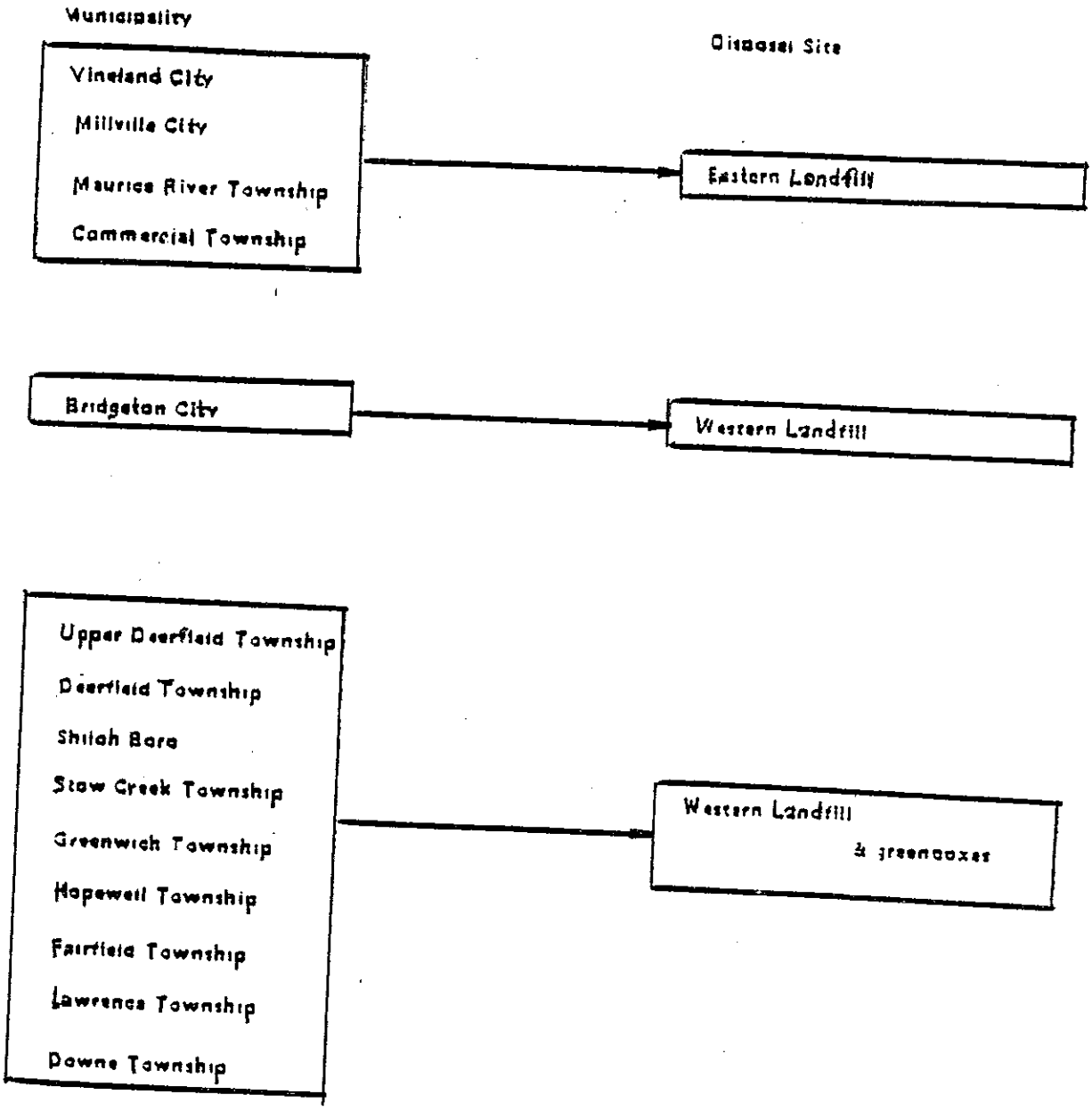


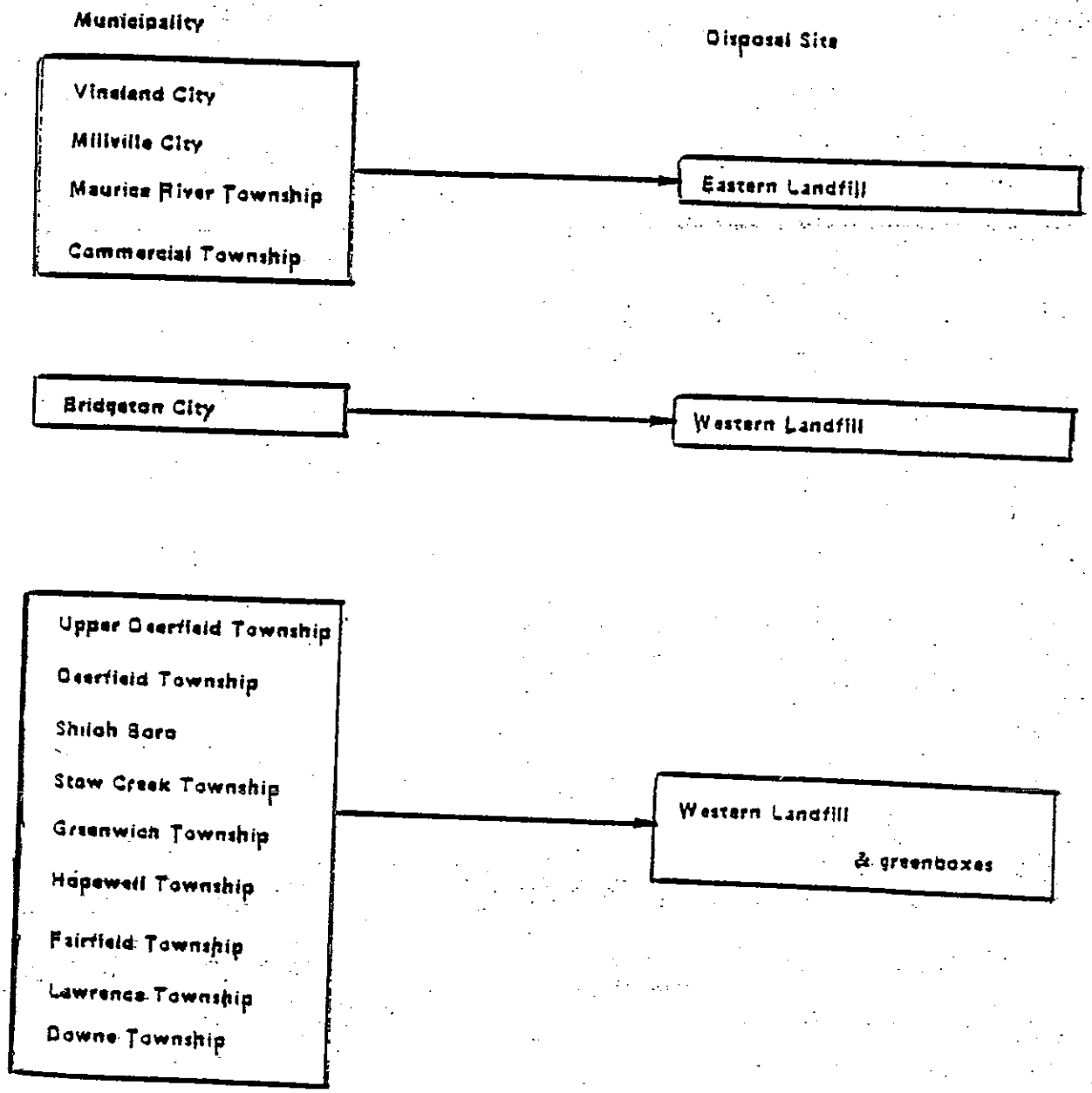
TABLE 1
WASTE TYPES 13, 23, 25, & 27
1980-1982 WASTE FLOW

MUNICIPALITY	WASTE TYPES			
	BULKY WASTE (TYPE 13)	VEGETATIVE WASTE (TYPE 23)	ANIMAL & FOOD PROCESSING WASTE (TYPE 25)	NON-CHEMICAL INDUSTRIAL WASTE (TYPE 27)
Bridgeton	Bridgeton	Bridgeton	Bridgeton	Bridgeton
Commercial	Commercial	Commercial	Commercial	Millville
Deerfield	Deerfield	Deerfield	Vineland	Millville
Fairfield	Fairfield	Fairfield	Bridgeton	Bridgeton
Hopewell & Greenwich	Hopewell/ Greenwich	Hopewell Greenwich	Bridgeton	Bridgeton
Lawrence	Lawrence	Lawrence	Vineland	Millville
Maurice River	Maurice River (0609B & 0609C)	Maurice River (0609B & 0609C)	Maurice River (0609B)	Millville
Millville	Millville	Millville	Vineland	Millville
Newfield	Vineland	Vineland	Vineland	Millville
Stow Creek & Shiloh	Stow Creek/ Shiloh	Stow Creek/ Shiloh	Bridgeton	Bridgeton
Upper Deerfield	Upper Deerfield	Upper Deerfield	Bridgeton	Bridgeton
Vineland	Vineland	Vineland	Vineland	Millville

FIGURE 3

WASTE TYPES 13, 23, 25, & 27

1983 -1990 WASTE FLOW



Status of the Site Selection Process

The landfill planning process has continued under the auspices of the CCIA following the approval of the modified plan in 1980. Analyses of potential landfill sites, including the two-site alternative, as well as transporting solid wastes out of the County, were presented in the Solid Waste Resource Recovery Study (1981) and in subsequent materials for the CCIA.

A total of 18 alternative landfill sites have been selected and studied.

Landfill site selection issues and criteria were analyzed in a report prepared for the CCIA entitled: A Rational Approach to Landfill Locations. The first step in the systematic evaluation of alternative landfill sites outlined in this report was to screen the initial 28 site possibilities to the 13 candidate sites. This step eliminated all sites located in the environmentally-sensitive areas of the County--the CAFRA zone, the Pinelands, floodplains, and prime agricultural areas. 5 additional sites were later analyzed.

The second step was to develop basis of design factors. This sets forth a way to evaluate the environmental safeguards to be incorporated at the new landfill site. These factors were used to evaluate the sites, and include the following:

Site Location

1. Base of site must be 5 feet above seasonal high water table

2. Site cannot be in an environmentally-sensitive area

3. Site must be in area of groundwater discharge (groundwater beneath the site is moving slowly toward a surface stream)

Control of Water Pollution

1. Base of landfill will contain a two-foot thick clay liner and a drainage system to collect leachate produced in the landfill

2. Leachate will be collected, stored, and removed to a sewage treatment plant for proper disposal

3. Dumped solid wastes will be covered daily with native material, and when the desired elevation is reached, a two-foot clay cover, will be provided to reduce penetration of precipitation into the landfill

4. Surface runoff from the active dump site will be collected and removed

Control of Odors and Vectors

1. A gas collection system will be provided for either proper disposal (flaring) or use of the biogas

2. Daily cover of all dumped material will be provided with proper equipment

3. Collected leachate will be removed and treated

4. Vegetated buffers will be provided that assure a distance in excess of 1,000 feet from nearest residences

Unsightliness

1. Vegetated buffer strips will be provided

2. Active dumping at any one time will be restricted to a 6-acre site

3. Daily cover will be applied using proper equipment

4. A bad weather site will be provided to assure continuous managed operations

5. Proper planning, engineering, and supervision of the site will be provided

6. Debris in the vicinity of the landfill will be promptly removed

Truck Traffic

1. The use of large capacity, modern compactor trucks for collection and transport will be encouraged

2. An effort will be made to locate the site as near the center of production of the solid wastes as is practicable

3. The site will be accessible from a heavy duty road

Economics

1. The site will be located as close to the center of solid waste production (intersection of Sherman Avenue and Route 55) as is practicable to reduce collection costs

2. When clay is available on or near the site, it will be incorporated into the landfill liner

3. The variation in land costs at the sites will be considered

Two other alternatives also were evaluated. These were a two-landfill option, and transporting solid waste to a landfill out of the County. Both of these alternatives were rejected because they were excessively costly.

Three of the eighteen sites have been recommended to the municipalities for their approval. None of these received the necessary 75 percent support. Three other sites have been discussed intensively by the CCIA and municipalities, but none have received the necessary acceptance.

The Freeholders, the CCIA, and the municipalities are now proceeding cooperatively with the site selection process.

Status of Source Separation Efforts

Three municipalities in Cumberland County have recently taken initiative to implement source separation programs. These efforts have been assisted by the Cumberland County Planning Board, which published in September 1980 the Cumberland County Source Separation Feasibility Study. During the past two years, a staff member of the Planning Board has been available on a regular basis to assist municipalities interested in source separation.

The City of Vineland has aggressively implemented source separation. Its Ordinance #1320 established a program of mandatory source separation for the residents within its Garbage and Trash District #1. This District includes about 40% of the City's population of 53,000. The District is served by a solid waste hauler under contract with the City. The ordinance, which was effective January 1, 1983, requires that glass containers and newspapers be separated and placed at curbside with other mixed trash on alternate collection days. Revenues from the sale of the glass and paper will partially offset the price of collection.

The City of Millville has received a grant from the New Jersey Office of Recycling to provide start-up costs for a source separation program. The program would initially be voluntary but would become mandatory. Proposed items to be recycled are newspaper,

cardboard, glass, aluminum and ferrous metals. Fairfield Township has also received a grant to assist with the funding of a litter abatement campaign.

Other Townships have cooperated with residents and civic groups to achieve a degree of source separation.

Rationale for the Amendments

There are 3 reasons for amending the currently approved Solid Waste Management Plan for Cumberland County. These are:

1. The Improvement Authority, based on analyses of solid waste management during 1981 and 1982, has determined that a single County-wide landfill is the most cost-effective solution. Economies of scale can be realized in construction and operation, and transportation costs can be minimized by the utilization of green boxes.

2. The County does not have a new landfill operational because of difficulties encountered in siting the facility. The Improvement Authority has submitted three sites for municipal approval, but all have been rejected. State statutes regulating Improvement Authorities require that any action receive the approval of municipalities representing 75% of the County's population. Because of the improbability, perhaps impossibility, of receiving the required approval, the Board of Chosen Freeholders has taken over the responsibility of siting the landfill. Site 18 has been selected by the Board of Chosen Freeholders. Preparations are being made for formal approval of the site.

3. The Plan must be amended to provide for the interim period until the new County-wide landfill is operational. The County feels, after discussion with State officials that an extension of 18 months is required.

The Interim Plan

The Interim Plan is formulated to manage solid wastes in Cumberland County for the years 1983 and 1984. The three premises of the Interim Plan are:

- That the CCIA will implement a new County-wide landfill on site 18 to be operable by January 1, 1985.
- That the flow of solid waste be redirected from landfills that have exhausted their capacity to those where capacity remains
- That source separation will be implemented by municipalities to reduce the flow of solid waste to landfills

Essentially, the Interim Plan will bridge the gap between the present and the opening of the new County-wide landfill. The supporting data for the Interim Plan are presented in Tables 2, 3, and 4.

Table 2 contains the recorded volumes of solid waste received by the four BPU landfills in Cumberland County for the first six months of 1982 and the estimated total volume for the year. The estimated volume of 600,000 cubic yards per year divided by the 128,000 tons per year (1980 assumed to equal 1982) yields an average of 4.7 cubic yards per ton.

Table 3 shows the effect that source separation of 5 to 10 percent would have on the volume of solid waste generated in the County.

Table 4 shows the status of each of the landfills in the County. The total remaining capacity of 924,100 cubic yards, when compared with the volumes of solid waste requiring landfilling, demonstrates that the remaining capacity will accommodate the County's solid waste. as follows:

- With no recycling--18.5 months
- With 5 percent recycling --19.5 months
- With 10 percent recycling--20.5 months

The Board of Chosen Freeholders has now selected a landfill site, which the CCIA will implement expeditiously in order to be able to accept waste as quickly as possible.

Table 2 Estimated Quantity of Solid Waste Entering at Selected Cumberland County Landfills, 1982

Landfill(a)	Recorded Cubic Yards January 1 to June 30	Estimated Cubic Yards 1982
Bridgeton	41,167	83,000
Millville	56,349	114,000
Upper Deerfield	13,591	29,200
Vineland	146,600	295,000
Total	257,707	521,200

SOURCE: New Jersey Board of Public Utilities.

(a) These four landfills account for 85 percent of the estimated total volume of solid wastes disposed in Cumberland County. Thus, the yearly volume of solid wastes entering landfills is estimated to be approximately 600,000 cubic yards per year for Cumberland County.

Table 3: Estimated Quantity of Solid Waste Going to Landfills as a Function of Source Separation Effectiveness

Degree of Recycling	Solid Waste to Landfills cubic yards/year
none	600,000
5%	570,000
10%	540,000

Table 4: Status of County Landfills Assuming No Redirection of Waste Flow (a)

Landfill	Remaining Capacity (cubic yards)	Remaining Life
Stow Creek	Closed, Administrative Consent Order December 31, 1981	
Upper Deerfield	7,500	6 months (1/2 of domestic flow)
Maurice River	46,800	3 years
Commercial Township	76,800	20 years
Downe Township	66,000	30 years
Deerfield	15,000	10 years
Bridgeton	88,000	10 months - 1 year
Millville	-0-	-0-
Vineland	600,000	2 years
Hopewell	3,000	1 year
Lawrence	6,000	1 - 2 years
Fairfield	15,000	5 - 6 years
Total	924,100	

(a) Compiled by Sheaffer & Roland, Inc. February 1983.

The Selected Site
Site 18 - Millville/Vineland

Location and Description

Site 18 is located south of Route 552, north of Route 608, and west of Route 55 at the boundary of the City of Millville, the City of Vineland, and Deerfield Township. The location is shown in Figures 4 and 5. The 90 acre site is made up of several parcels, all owned by Green Acres. The site and all adjacent lands are wooded.

The actual landfill, encompassing 35 acres, will be located within the 90 acre site so that no residences will be located within three quarters of a mile and only 2 residences will be within one mile.

The landfill will be designed for a ten year life. The 35 acre base of the actual landfill will be constructed of two feet of compacted clay. Solid waste will be placed in cells about six feet in height which will be covered with soil each day. These cells will be stacked on each other until the final landfill stands 130 feet above the current elevation. Extra housekeeping measures will be used to control blowing paper and other nuisances often associated with a landfill.

The final configuration will be an aesthetically pleasing hill with slopes and vistas that can provide recreational opportunities. A "borrow" pit lake will also be constructed as cover material is removed. The lake will enhance the appearance of the overall site and will provide additional recreational opportunities.

Access and Transportation

The site is located approximately 8.25 miles from Bridgeton, 7.00 miles from Millville and 7.50 miles from Vineland, with all distances measured from the city center. The exact distances will depend upon where the entrances to the property are placed off of Route 552. Route 552 is classified as a major collector and, having recently been resurfaced and widened, is capable of handling truck traffic safely and efficiently.

Environmental Factors

The site can be adapted for use as a landfill with a minimum of environmental disruption. There is no indication that the vegetation or wildlife of the area contains any rare or endangered species. The site, including the portion where the landfill will be located, is in the drainage basin of the Maurice River, upstream of Union Lake. The depth of seasonal high groundwater beneath the landfill varies from 15 to 25 feet below the ground surface, depending on the surface elevation.

Leachate from within the landfill will be captured and transmitted to a sewage treatment plant. The two-foot thick compacted clay liner will be designed so as to collect the leachate. Drain pipes will be constructed on top

of the liner so that all of the leachate can be withdrawn. The leachate will then be transported either by trucks or pipeline to a sewage treatment plant for processing.

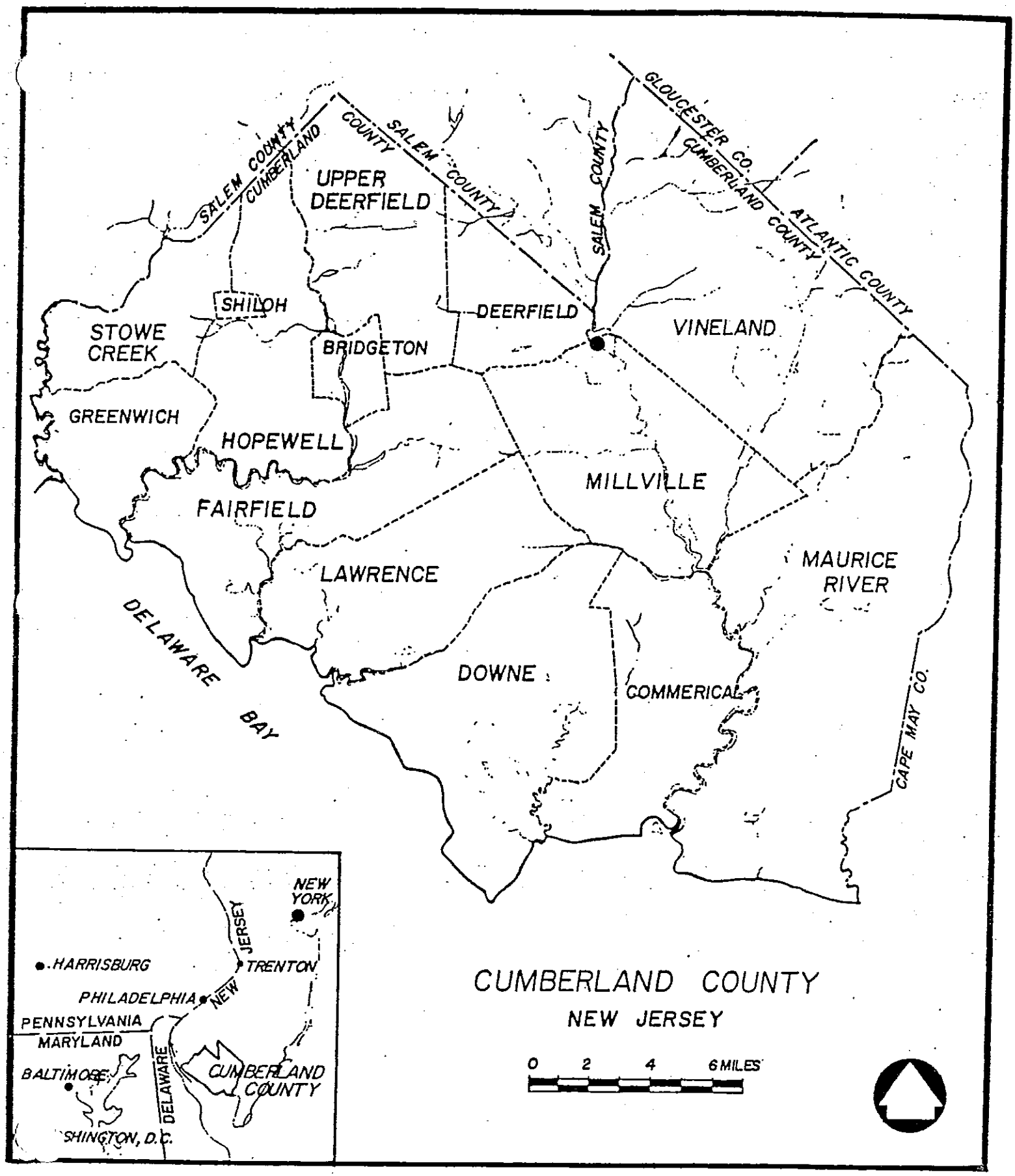
Theoretically, a small amount of leachate, between 200 and 400 gallons per day, can pass through the 2 foot compacted clay liner. This amount of leachate, comparable to what is produced by a septic tank serving a single family home, will be subject to natural filtration as it moves through the clay liner and the soil. It will take more than 20 years for any "escaping leachate" that passes through the clay liner to reach the Maurice River. This is more than sufficient time to recapture this filtered leachate before it can migrate into any potential water source if tests show it to be necessary. Monitoring wells will be placed around the landfill site to detect any contamination of groundwater. If pollutants are present, a small volume of water can be withdrawn from the ground to control the migration. The removed groundwater can then be properly treated. Additionally, there are no residential wells downgradient and no potential for development because all lands adjacent to the tract are owned by Green Acres.

Economic Factors

The economic comparison of this site with other potential sites is largely a function of haulage costs. The estimated landfill cost (tipping fee) at this site is $7.73 per ton. The estimated average hauling cost is $3.46 per ton, resulting in a total cost of $11.19 per ton.

Additionally, the estimated cost per ton for disposal of solid waste at this site is $6.18 per ton for the host community (Millville) and $8.23 per ton for the remainder of the County. If the County-wide average of 4.7 cubic yards per ton is assumed, this means tipping fees of $1.31 and $1.75 per cubic yard would be required. This compared favorably with the current Vineland tipping fees of $2.07 and $3.71 per cubic yard. Economies of scale to be realized by the regional landfill are evident.

Figure 4: Location Map of Site 18.



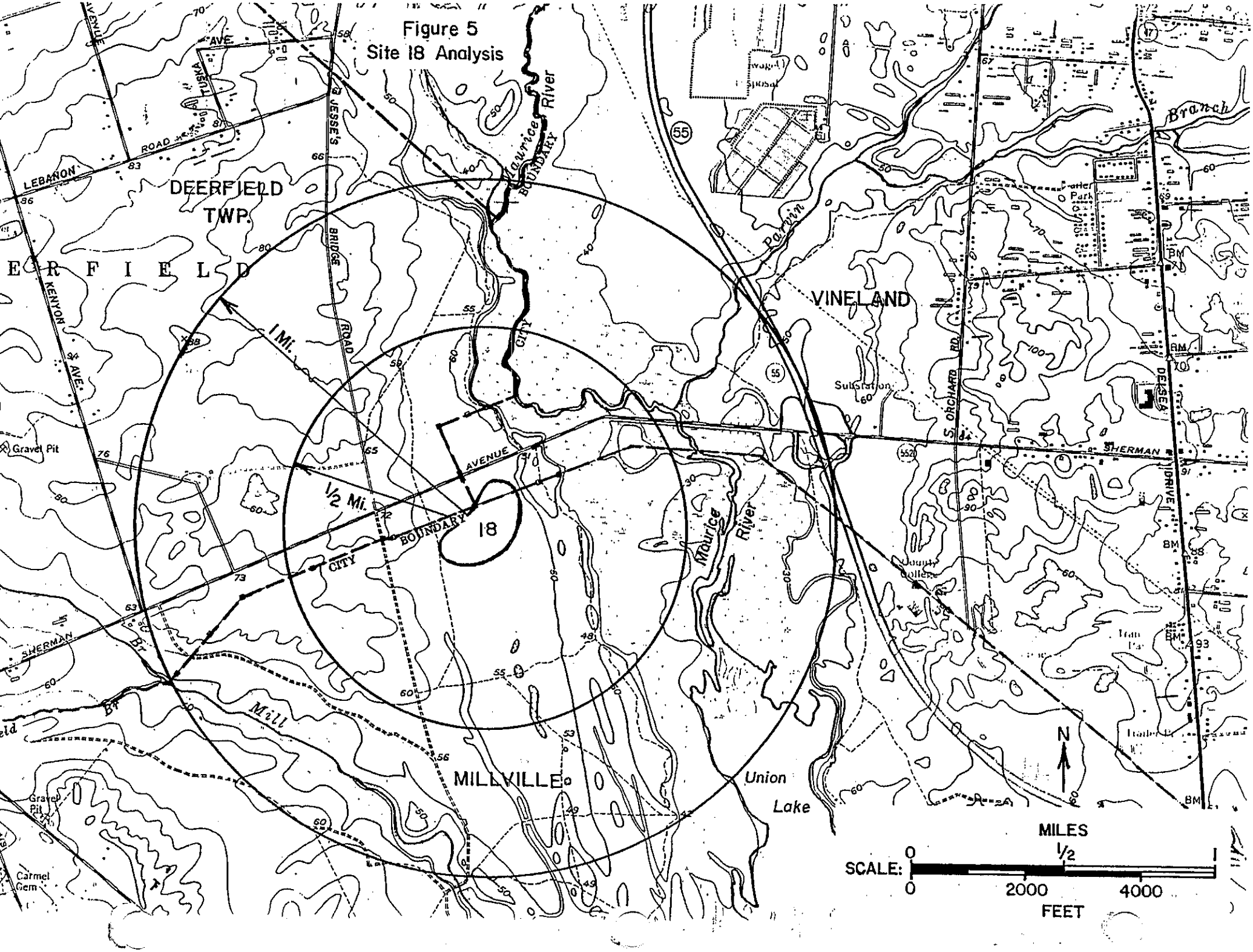


Figure 5
Site 18 Analysis
DEERFIELD TWP.
DEERFIELD
VINELAND
MILLVILLE
Maurice River
Union Lake
Mill Br.
Parvin Branch
LEBANON ROAD
KENYON AVE.
JESSE'S BRIDGE ROAD
CITY BOUNDARY
SHERMAN AVENUE
S. ORCHARD RD.
DELSEA DRIVE
Gravel Pit
Substation
Carmel Gem
1 Mi.
1/2 Mi.
18
N
MILES
SCALE:
0
1/2
1
0
2000
4000
FEET

Amendments

The following amendments are proposed to the Cumberland County Solid Waste Management Plan, the Modifications to Cumberland County Solid Waste Management Plan, and the Certification of Approval with Modifications of the Cumberland County Solid Waste Management Plan which became effective December 31, 1979; January 14, 1981; and June 1, 1981, respectively:

1. That one County-wide landfill will be established rather than two.
2. That the County-wide landfill will be located at Site 18 which includes portions of Block 605, Lots 4 and 6 in the City of Millville and Block 959, Lot 1 in the City of Vineland.
3. That the date for the County-wide landfill to be operational will be extended to January 1, 1985.
4. That all municipal landfills in Cumberland County which have approved remaining capacity will be permitted to remain operational until December 31, 1984, or until the particular landfill's capacity is exhausted, or until the County-wide landfill becomes operational, whichever first occurs.
5. That waste generated in municipalities which have exhausted their landfill capacity be disposed of at those municipal landfills which continue to be operational.
6. That a review of the implementation progress for Site 18 will be undertaken in October 1983. If the aforementioned review indicates that unanticipated delays have thwarted the implementation effort, waste flows redirected from other municipalities to the City of Vineland may

have to be redirected outside of the County.

7. That the proposed schedule for the implementation of the landfill at Site 18 as shown in Figure 6, will be followed.

The full text of the revisions follows. Changes or additions in text are indicated by <u>underline</u> and deletions by ~~strikeouts~~.

Department of Environmental Protection, Certification of Approval with Modifications of the Cumberland County Solid Waste Management Plan, 1981, page 7 of 10.

m) ~~Upon closure of the Bridgeton City landfill, facility number 0601A, the Deerfield Township landfill, facility number 0603A, the Fairfield Township landfill, facility number 0605A, the Hopewell Township landfill, facility number 0607A, and the Stow Creek Township landfill, facility number 0612A, (the five facilities identified in this section shall according to the modifications adopted and promulgated herein, close by December 31, 1982) wastes going to these facilities shall be disposed of at a regional County landfill which is to be operational as of December 31, 1982.*~~

n) ~~Upon closure of the Commercial Township landfill, facility number 0602A, the Downe Township landfill, facility number 0604B, the Lawrence Township landfill, facility number 0608C, the Maurice River Township landfills, facility numbers 0609B and 0609C, the Millville City landfill, facility number 0610A, and the Vineland City landfill, facility number 0614B, (the seven facilities identified in this section shall, according to the modifications adopted and promulgated herein, close by December 31, 1982) wastes going to these facilities shall be disposed of at a second regional county landfill which is to be operational as of December 31, 1982.*~~

~~*In the event that any existing landfill reaches permitted capacity or develops operational problems requiring enforcement actions, it may be closed at an earlier date.~~

o) Upon closure of the Upper Deerfield Township landfill, facility number 0613A, (the facility identified in this section shall, according to the modifications adopted and promulgated herein, close by December 31, 1981) wastes going to this facility shall be disposed of at the Bridgeton City landfill, facility number 0601A, located in Bridgeton City, Cumberland County, New Jersey. Upon closure of the Bridgeton City landfill, solid wastes generated in Upper Deerfield Township shall be redirected to the County landfill noted in Section 1.m. herein.*

p) Cumberland County shall comply with the schedule outlined below in order to construct two County landfills to assure that sites capable of handling Cumberland County's solid waste are available for use by December 31, 1982. The facilities should be of sufficient capacity to handle all of Cumberland County's solid waste as an interim measure prior to the potential implementation of resource recovery.

- September 1, 1981 Selection of sites for regional landfills
- February 1, 1982 Acquisition of sites
- April 1, 1982 Submittal of any necessary applications and engineering plans
- December 31, 1982 Facilities to be operational

*In the event that any existing landfill reaches permitted capacity or develops operational problems requiring enforcement actions, it may be closed at an earlier date.

m) Upon closure of the Bridgeton City landfill, facility number 0601A; the Commercial Township landfill, facility number 0602A; the Deerfield Township landfill, facility number 0603A; the Downe Township landfill, facility number 0604B; the Fairfield Township landfill, facility number 0605A; the Hopewell Township landfill, facility number 0607A; the Lawrence Township landfill, facility number 0608C; the Maurice River Township landfills, facility numbers 0609B and 0609C; the Millville City landfill, facility number 0610A; the Stow Creek Township landfill, facility number 0612A; the Upper Deerfield Township landfill, facility number 0613A; and the Vineland City landfill, facility number 0614B (the twelve facilities identified in this section shall, according to the modifications adopted herein, close by December 31, 1984 or when the regional County landfill becomes operational, whichever first occurs), wastes going to these facilities shall be disposed of at one regional County landfill which is to be operational as of January 1, 1985.*

n) The County-wide landfill shall be located at Site 18, which includes portions of Block 605, Lots 4 and 6 within the City of Millville and Block 959, Lot 1 within the City of Vineland.

0) Cumberland County shall attempt to implement the schedule outlined below in order to construct one regional landfill to serve the County's needs.

- July 14, 1983 - Selection of a site for the regional landfill.

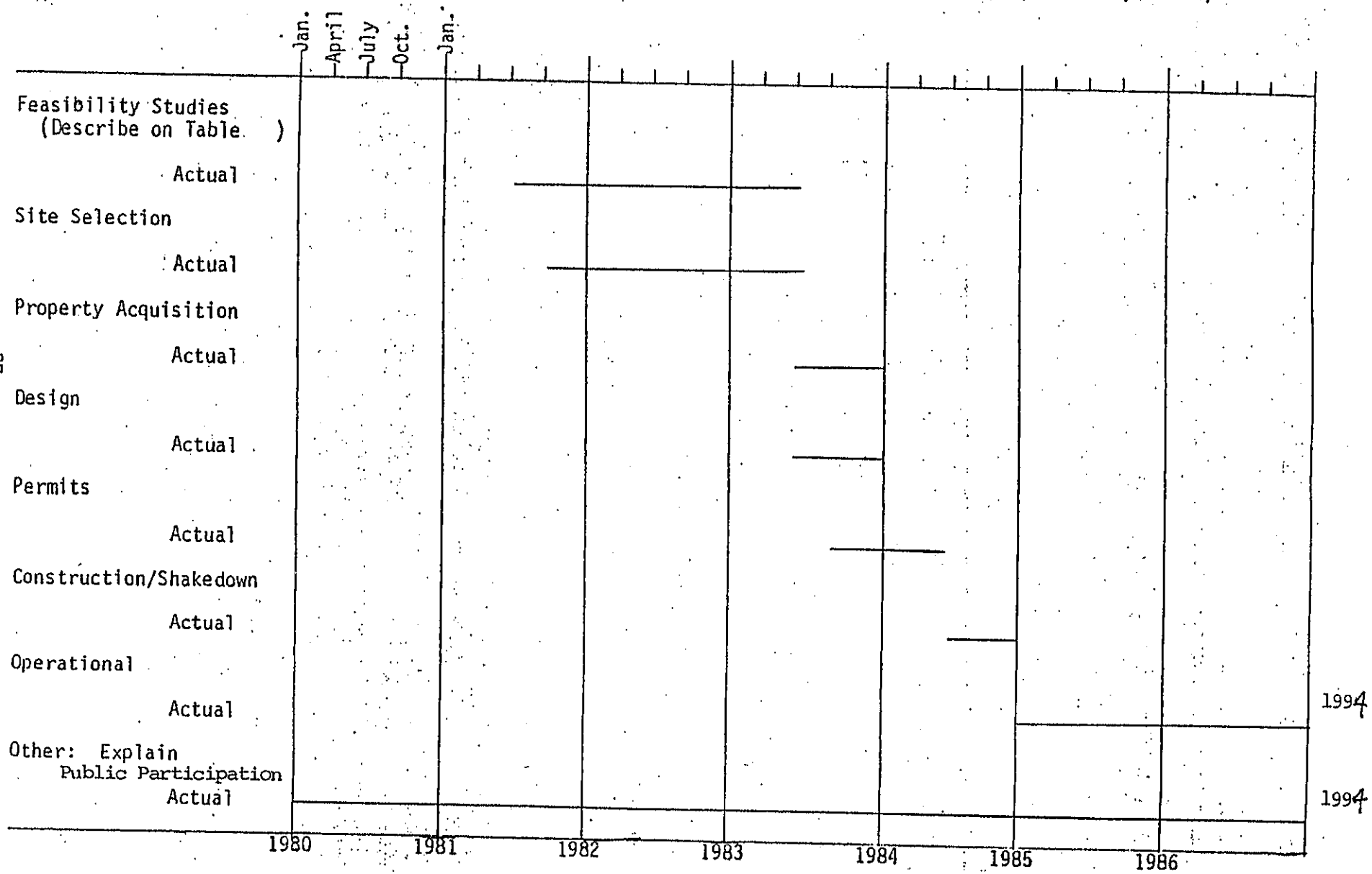
- December 31, 1983 - Acquisition of the site.
- June 30, 1984 - Approval of any necessary applications and engineering plans.
- January 1, 1985 - The facility is to be operational.

p) A review of the implementation progress shall be undertaken in October of 1983. If unanticipated delays have thwarted the implementation efforts, waste flows redirected from other municipalities to the Vineland City landfill, facility number 0614 B, may be redirected outside of the County.

*In the event that any existing landfill reaches permitted capacity or develops operational problems requiring enforcement, it may be closed at an earlier date and its waste flow redirected to a landfill with remaining permitted capacity.

Figure 6
Proposed Implementation Schedule

Facility County-wide landfill (complete one sheet for each new facility proposed or planned)



APPENDIX A

FREEHOLDER APPROVAL OF PLAN AMENDMENT #1

COUNTY OF CUMBERLAND
BOARD OF CHOSEN FREEHOLDERS
ADMINISTRATION BUILDING
790 EAST COMMERCE STREET
BRIDGETON, NEW JERSEY 08302

CHARLES FISHER
DIRECTOR

August 1, 1983

Robert E. Hughey, Commissioner
New Jersey Department of Environmental Protection
CN 402 - Room 802
Labor & Industry Building
Trenton, NJ 08625

Dear Commissioner Hughey:

We are pleased to submit to the Department of Environmental Protection the Amendments and Update of the Cumberland County Solid Waste Management Plan for your review.

The Amendments designate site #18, a 90 acre tract located in the Cities of Millville and Vineland, as the selected location of the proposed, regional landfill. The County is cognizant of the potential harm which existing, municipal dumps could create and is endeavoring to remedy the situation. The Board of Chosen Freeholders feels that siting the landfill is the first, and most difficult step to developing an environmentally secure disposal facility.

The Update revises data contained in the Plan, which received a Certification of Approval with Modifications in 1981. Some of the information contained in the Update, particularly the projections, are dependent on the ultimate development of site #18 as a regional landfill.

The Board of Chosen Freeholders hopes for a timely review of the Amendments and Update of the Cumberland County Solid Waste Management Plan. As both documents only reflect existing waste flows, with no specific recommendations for redirections, it is hoped that State review will require less than the allowed 5 months so that the County can proceed with the critical task of

developing an environmentally secure landfill. The Board of Chosen Freeholders wishes to continue working cooperatively with the Department of Environmental Protection to safeguard the environment for the residents of the County of Cumberland.

Sincerely,

Charles Fisher, Director
Cumberland County Board
of Chosen Freeholders

CF:bb

BOARD OF CHOSEN FREEHOLDERS

COUNTY OF CUMBERLAND

MEMBER	AYE	NAY	NOT VOTING	ABSENT
FISHER	✓			
FREITAG		✓		
QUINN	✓			
REINARD				✓
RICCI	✓			
SALMON	✓			
SIMMERMAN	✓			

R E S O L U T I O N - (1983) - 213

Offered by: Mr. Simmerman

Seconded by: Mr. Salmon

Date: July 14, 1983

Approval Of Amendments To The Cumberland County Solid Waste Management Plan

WHEREAS, proposed amendment to the Cumberland County Solid Waste Management Plan has been prepared setting forth certain amendments including provision for one County-wide landfill instead of two and specifying Site 18 for the County-wide landfill; and

WHEREAS, copies of the proposed amendment have been filed with the municipal officials and offices in the various municipalitites in Cumberland County; and

WHEREAS, this Board has met and consulted with the Solid Waste Advisory Council on the proposed amendment; and

WHEREAS, this Board did, pursuant to publication and notice, hold a public hearing on the proposed amendment to the Solid Waste Management Plan; and

WHEREAS, this Board has duly considered the matter;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF CHOSEN FREEHOLDERS OF THE COUNTY OF CUMBERLAND, as follows:

That this Board hereby approves the Amendment To The Cumberland County Solid Waste Management Plan prepared by Sheaffer & Roland, Inc. and dated July, 1983, a copy of which is on file with the Clerk of this Board and which, in brief, extends the life of certain municipal landfills, provides for one County-wide landfill instead of two, extends the deadline by which County facilities for disposal of all solid waste in the County shall be operational and redirects certain waste flows from those municipalities with closed landfills to open landfills.

Passed and adopted at a regular meeting of the Board of Chosen Freeholders of the County of Cumberland, held at the Court House, Broad and Fayette Streets, Bridgeton, New Jersey on Thursday evening, July 14, 1983 at 8:00 o'clock prevailing time.

DATED: July 14, 1983

APPENDIX B

NJDEP CERTIFICATION OF PLAN AMENDMENT #1

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ROBERT E. HUGHEY, 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)
(CUMBERLAND COUNTY SOLID WASTE)
(MANAGEMENT DISTRICT)

CERTIFICATION
OF THE JULY 14, 1983 AMENDMENTS
TO THE CUMBERLAND 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 March 4, 1981, the Department approved, with modifications, the Cumberland 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 Cumberland County Board of Chosen Freeholders completed such a review and on July 14, 1983, adopted Amendments to its approved District Solid Waste Management Plan. The Amendments were received by the Department of Environmental Protection on August 4, 1983 and copies were distributed to various state level agencies for review and comment, as required by law.

The Department has reviewed these Amendments, as well as the entire Cumberland County District Solid Waste Management Plan, and has determined that the Amendments adopted by the Cumberland County Board of Chosen Freeholders on

July 14, 1983 are approved in part and rejected in part (as explained below) in accordance with 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 several important ways. As a result, portions of the July 14, 1983 Amendments to the approved Cumberland County District Solid Waste Management Plan are rejected.

B. Certification of Cumberland County District Solid Waste Management Plan Amendments

I, Robert E. Hughey, 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 July 14, 1983 Amendments to the approved Cumberland County District Solid Waste Management Plan and certify to the Cumberland County Board of Chosen Freeholders that, except as provided below, the July 14, 1983 Amendments are judged not to be in compliance with the requirements of N.J.S.A. 13:1E-21 and are hereby rejected.

The Department has reviewed the entire Cumberland County District Solid Waste Management Plan, including these Amendments, 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.

Report

1. N.J.S.A. 13:1E-21a.(1) requires an inventory of the sources, composition, and quantity of solid waste generated within Cumberland County.

   Cumberland County has complied with this requirement and this section of the Cumberland County District Solid Waste Management Plan remains approved.

2. N.J.S.A. 13:1E-21a.(2) requires projections on the amounts and composition of solid waste for a ten year period.

   Cumberland County has complied with these requirements and this section of the Cumberland County District Solid Waste Management Plan remains approved.

3. N.J.S.A. 13:1E-21a.(3) requires an inventory and appraisal of all solid waste disposal facilities . . . and the identity of every person engaged in solid waste collection or disposal within the District.

   Cumberland County has complied with these requirements and this section of the Cumberland County District Solid Waste Management Plan remains approved.

4. N.J.S.A. 13:1E-21a.(4) requires an analysis of existing solid waste collection systems and transportation routes within the Solid Waste Managment District.

Cumberland County has complied with this requirement and this section of the Cumberland County District Solid Waste Management Plan remains approved.

Plan

1. N.J.S.A. 13:1E-21b.(1) requires the designation of a department, unit, or committee of County government . . . to supervise the implementation of the County's Solid Waste Management Plan.

   Cumberland County has complied with the requirements of N.J.S.A. 13:1E-21b.(1) and the Cumberland County Improvement Authority, under the direction of the Cumberland County Board of Chosen Freeholders, is the approved solid waste implementation agency in Cumberland County to carry out implementation of the approved Cumberland County District Solid Waste Management Plan. In response to the County Environmental Health Act (N.J.S.A.26:2A3-21), the Cumberland County Health Department cooperates with the Cumberland County Improvement Authority in planning and implementation of the County's solid waste diposal operations.

2. 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.

   Cumberland County has developed a solid waste disposal strategy which calls for the implementation of a single county-wide landfill and increased utilitzation of low technology resource recovery. While this section of the July 14, 1983 Amendments is approved, the Department recommends that Cumberland County evaluate the feasibility of utilizing high technology resource recovery.

   The Department notes that Cumberland County's goal of recycling 10% of its municipal solid waste is inconsistent with the Statewide goal of recycling 25% by 1986.

   The Department of Environmental Protection will monitor the progress of the District in meeting the milestones of its approved solid waste implementation plan. The Cumberland District shall continue to submit quarterly status reports to the Department of Environmental Protection concerning the District's progress in meeting these milestones. The next status report shall be submitted to the Department's Division of Waste Management by March 1, 1984.

3. 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.

   a) Cumberland County has complied, in part, with the requirements of N.J.S.A. 13:1E-21b.(3) and the following solid waste facilities are an approved part of the Cumberland County District Solid Waste

Management Plan and are required to operate in conformance with the Interdistrict and Intradistrict Solid Waste Flow Rules (N.J.A.C. 7:26-6 et seq.).

These facilities include Bridgeton City Landfill (0601A), Bridgeton; Commercial Township Landfill (0602A), Commercial Township; Deerfield Township Landfill (0603A), Deerfield Township; Downe Township Landfill (0604B), Downe Township; Fairfield Township Landfill (0605A), Fairfield Township; Hopewell Township Landfill (0607A), Hopewell Township; Lawrence Township Landfill (0608C), Lawrence Township; Maurice River Township Landfill (0609B), Maurice River Township; Upper Deerfield Township Landfill (0613A), Upper Deerfield Township; and Vineland City Landfill (0614B), Vineland.

b) The Alex Hayes Compost (0614A) facility (Vineland) is an approved part of the Cumberland County District Solid Waste Management Plan.

c) The Cumberland County Board of Chosen Freeholders, in the July 14, 1983 Amendments, designated two additional facilities for inclusion in the County Plan. The following facilities are hereby made an approved part of the Cumberland County District Solid Waste Management Plan.

   i) The inclusion within the Plan of the City of Millville compost facility, to be located on Block 631, Lot 53A in the municipality of Millville is approved. The construction or operation of any facilities at this site shall be preceded by the obtaining of all necessary permits and approvals under N.J.S.A. 13:1E-1 seq. and all other applicable laws.

   ii) The inclusion within the Plan of the John Mellor, Jr. compost facility, to be located on Block 422, Lot 11A in the municipality of Millville is approved. The construction or operation of any facilities at this site shall be preceded by the obtaining of all necessary permits and approvals under N.J.S.A. 13:1E-1 et seq.and all other applicable laws.

d) The Cumberland County Board of Chosen Freeholders, in the July 14, 1983 Amendments, proposed seven amendments to the approved Cumberland County District Solid Waste Management Plan concerning available and additional suitable landfill sites. The Department has reviewed each proposed amendment and its findings are noted.

   i) That one County-wide landfill will be established rather than two.

      This amendment is approved and made an approved part of the Cumberland County Distrtict Solid Waste Management Plan under N.J.S.A. 13:1E-21b.(2).

   ii) The designation of the site of the county landfill which is to be located at the following Blocks and Lots:

City of Millville	Block 605, Lots 4 and 6
City of Vineland	Block 959, Lot 1

The Department has reviewed this proposed location (Site #18) for the county landfill and determines that this site is in conflict with established land use and does not represent an available suitable site for a county landfill. This property is part of a recent land acquisition by the State for preservation and is subject to an explicit deed restriction prohibiting its use for solid waste facilities. Therefore, this site location for the proposed county landfill must be rejected and is not made an approved part of the Cumberland County District Solid Waste Management.

iii) That the date for the county-wide landfill to be operational will be extended to January 1, 1985.

The Department believes that January 1, 1985 is a realistic date for a county landfill given the county's current determined effort to select an alternate site. However, this part of the county plan must be considered deficient since the county has not identified sufficient available capacity remaining to meet its disposal needs until 1985.

iv) That all municipal landfills in Cumberland County which have approved remaining capacity will be permitted to remain operational until December 31, 1984, or until the particular landfill's capacity is exhausted, or until the county-wide landfill becomes operational, whichever first occurs.

This amendment is approved subject to the condition that no existing landfill may continue to operate where it has failed to meet all applicable health and environmental standards.

v) That waste generated in municipalities which have exhausted their landfill capacity be disposed of at those municipal landfills which continue to be operational.

This amendment is approved but, as adopted, it is incomplete regarding the procedures for amending the Interdistrict and Intradistrict Solid Waste Flow Rules (N.J.A.C. 7:26-6 et seq.). A plan amendment which proposes to redirect waste flows must explicitly state the alternative disposal sites for each waste type for each affected municipality. In addition, any waste flow redirection which would direct waste to a non-utility municipal landfill must be provided for in an intermunicipal agreement between the affected municipalities. Therefore, Cumberland County must amend its plan to include this specific information and copies of executed intermunicipal agreements in order to perfect its proposal to allow existing landfills to receive new waste flows.

vi) That a review of the implementation progress for Site 18 will be undertaken in October 1983. If the aforementioned review indicates that unanticipated delays have thwarted the implementation effort, waste flows redirected from other municipalities to the City of Vineland may have to be redirected outside of the County.

The Department approves this amendment and notes that the designation of Site 18 has been rejected elsewhere in this plan certification. Thus the need for evaluation of out-of-county alternatives is even more important. Moreover, the amendment, as adopted, is incomplete regarding the procedures for amending the previously cited State waste flow rules. If Cumberland County wishes to utilize a landfill facility located in another district, then the County must negotiate an interdistrict waste flow agreement with the County in which the facility is located before the identified facility can be utilized.

vii) That the proposed schedule for the implementation of the landfill at Site 18 will be followed.

This amendment is approved for the same reasons as amendment iii) above. As previously noted, this section of the plan remains deficient because the County has not identified sufficient available capacity to handle the County's waste until 1985. The need to designate a replacement for Site 18 will further compress the timing of necessary activities to realize an operational site by January 1, 1985. Nevertheless, this date can be achieved.

4. 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 disposal facilities.

Cumberland County has complied with the requirements of N.J.S.A. 13:1E-21b.(4) and this section of the Cumberland County District Solid Waste Management Plan remains approved.

5. 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.

The Solid Waste Management Act requires all districts which import or export waste to reach formal interdistrict agreement. No such agreement exists between the Cumberland District and the Gloucester District to provide for the current waste flow from Newfield Borough, Gloucester County to the Vineland landfill in the City of Vineland, Cumberland County. Therefore, the Cumberland County District Solid Waste Management Plan is deficient with respect to the requirements of N.J.S.A. 13:1E-21b.(5).

6. 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.

   Cumberland County has evaluated various financing alternatives for the proposed County landfill facility but has indicated that a selection of the appropriate financing method will be made at the time of final design. Therefore, this portion of the Plan will be certified when final financing arrangements are selected.

C. Cerfification of Amendments and Notification of Deficiencies by the Commissioner of the Department of Environmental Protection

In accordance with the provisions of N.J.S.A. 13:1E-24, I hereby approve in part, and reject in part, the July 14, 1983 Amendments to the Cumberland County District Solid Waste Management Plan.

In accordance with N.J.S.A. 13:1E-24, the Cumberland County Board of Chosen Freeholders are directed to conduct a public hearing within forty-five (45) days of the date of this Certification. The hearing shall be conducted pursuant to the procedures contained in N.J.S.A. 13:1E-23. The purpose of the hearing shall be to inform the public of the deficiencies identified in the Plan, to identify the County's plans for addressing these deficiencies, and to solicit public comment on these matters. Further, Cumberland County is directed to amend its Plan to address the deficiencies identified above. These amendments shall be adopted by the County and submitted to the Department of Environmental Protection within ninety (90) calendar days from the date of this Certification.

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 Cumberland County District Solid Waste Management Plan, including any Amendments made thereto, shall conform with the 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.

12/22/83
DATE

ROBERT E. HUGHEY
COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL PROTECTION