Executive Summary

A. Introduction

New York State faces a solid waste disposal crisis that will only intensify unless actions are taken to manage wastes in a comprehensive and integrated manner. Solid Waste disposal in the state has increased to an estimated 6.5 pounds per person per day, or to over 21.1 million tons annually. Recognition of this crisis led the state to enact in 1988 Chapter 70 of the Laws of 1988 as the Solid Waste Management Act. This Act calls for a State and local partnership in the planning and operation of solid waste management facilities. It provides guidance in the following solid waste management hierarchy:

- Waste reduction
- Reuse and recycling
- Energy recovery from waste
- Disposal by landfilling or other NYSDEC approved methods

The Act compels units of local government to develop integrated solid waste management plans. It provides that no permits will be issued after April 1, 1991 for solid waste management facilities that do not have such a plan in effect. Units of local government are defined as a county, group of counties, group of municipalities or any governmental agency/authority that is determined by NYSDEC to be capable of implementing a regional solid waste management plan approach.

Chemung County has standing as such a planning unit and has applied for and received a grant from the state to develop this COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN. This document was prepared in accordance with the requirements of the Solid Waste Management Act of 1988 and incorporates a full generic environmental assessment. It outlines the County’s past and current solid waste management strategies and practices and assesses alternate waste technology options and their potential environmental impacts. The plan also identifies and evaluates institutional and financial alternatives and recommendations for implementing an integrated solid waste management plan in Chemung County.
The CSWMP/FGEA document provides the following:

▲ CHAPTER I - Introduction
Purpose of the Plan

▲ CHAPTER II - Description of Action
Overview of past and present solid waste management practices, problems, and solutions experienced by the County

▲ CHAPTER III - Environmental Setting
Description of planning area characteristics
  ○ Environmental Setting
  ○ Existing collection and disposal practices
  ○ Solid waste quantities/characteristics
  ○ Recycling programs and markets

▲ CHAPTER IV - Technology Assessment
Outlines/analyzes various technologies available for solid waste management including:
  ○ Waste reduction
  ○ Recycling and reuse
  ○ Waste-to-energy
  ○ Composting
  ○ Landfilling

▲ CHAPTER V - Institutional and financial arrangements
Highlights institutional and financing options available for plan implementation

▲ CHAPTER VI - Integrated solid waste management system
Comprises the recommended county integrated solid waste management plan

B. Background

Chemung County has been involved in solid waste disposal and management since the late 1960’s. Prior to 1969, solid waste disposal was handled primarily by the municipalities and a few private, commercial collection and disposal operators. Disposal practices were, for the most part inadequate, thus creating public nuisance problems and
health hazards. Additionally, solid waste volumes were exceeding the capabilities of the existing operations.

The County, recognizing the inadequacy of existing waste disposal methods and that the volumes of waste would only increase, initiated a series of County-wide solid waste disposal studies to develop a coordinated long-range (2020) plan for proper solid waste disposal in the County. The Plans’ final recommendation was that a single County-wide solid waste disposal district be established whose functions would be to properly dispose of all solid waste generated within the County. The studies also concluded that a single, centralized County operated landfill was the most cost-effective solution and that a central milling station be constructed to ensure an environmentally superior product that would also prolong the site life of the disposal facility.

Following the Plans’ directive, in 1971 the County established in accordance with Article 5-A of County Law, the CHEMUNG COUNTY SOLID WASTE DISPOSAL DISTRICT (CCSWDD). The District constructed a milling station and sanitary landfill which commenced operation in December of 1973. The milling station was located on Lake Street in Elmira and the landfill on 139 acres in the Town of Chemung, with an approximate twenty-year life expectancy in five work areas.

An explosion at the milling station in 1979 curtailed operations at the facility for approximately three years. During that time unmilled waste was disposed at the landfill significantly shortening its twenty-year life expectancy. When the landfill’s permit expired in 1983, Areas 1 and 3 had already been closed and active fill was occurring in Area 5; Area 2 had been converted to a Construction and Demolition Debris (C&D) disposal site. Only Area 4 remained undeveloped.

Recognizing the limited life of the existing site, the CCSWDD contracted with Clark Engineers to conduct a landfill expansion site study to evaluate and screen potential sites. The results of this study strongly supported the location of the landfill expansion site on those lands adjoining the existing site. Based on this conclusion the CCSWDD initiated a series of detailed studies necessary to file for a new 6NYCRR Part 360 permit that would allow expansion of the landfill at the adjoining site. As part of these studies, NYSDEC required that the District conduct detailed hydrogeologic investigations to determine if the expansion areas were over a primary or principal aquifer and thus per NYSDEC policy not suitable for use as a landfill. These investigations, conducted by Geotechnical Systems of Binghamton, provided conclusive evidence that the proposed landfill expansion areas were not over an aquifer and therefore suitable for landfill operations. The CCSWDD immediately initiated detailed engineering plans and studies necessary to obtain a 6NYCRR Part 360 permit. These studies included a Draft Environmental Impact Statement and engineering report for the expansion site. The full SEQR process was conducted by the CCSWDD.
Administrative Board as Lead Agency. Construction and operation/certification of the interim landfill trench was completed under Consent Order during this permit process.

The Engineering and Certification Reports, DEIS and public participation program including, landfill expansion brochures all of which were part of the permitting process for the landfill expansion, stressed as early as 1988 that the County was embarking on a comprehensive solid waste management approach. The multi-faceted Plan was designed to insure that environmentally sound and cost-effective measures were implemented to meet the future solid waste needs of the County. Plan elements are outlined below:

- Expansion of landfill to 25-year life
- Evaluation and implementation of waste reduction and recycling programs
- Coordination and evaluation with adjoining counties regarding feasibility of Resource Recovery Plant

Consistent with these policy statements and the Solid Waste Management Act of 1988, the County enacted in 1989 a Solid Waste Management Law calling for safe, sanitary, environmentally sound and feasible management of the County's solid waste. The Law also established a Recycling Division of the District and a Recycling Managers position to meet the mandates of the state Act, as well as authorized the District Administrative Board to promulgate such standards, procedures rules and regulations as necessary to implement a Recycling Program. At approximately the same time the District changed its name to the Chemung County Solid Waste Management District (CCSWMD), a name that more closely reflects its role and responsibilities.

C. Objectives

Chemung County has been working within an informal framework of a comprehensive solid waste management program for a number of years. In preparing this Plan, the County is formalizing its management strategies into an integrated program through a thorough investigation and evaluation of technological, institutional and finanical options for solid waste management.

All of the County's previous efforts have been conducted in full conformance with State policy. Future efforts will continue to operate in accordance with State policy. The County's principle goal is to maximize the removal of materials from the waste stream that can effectively be reused or recycled, preventing such materials from entering the waste
stream, and to dispose of the residuals in an environmentally sound and cost-effective fashion. The objectives for achieving this goal as outlined in the Plan include the following:

- Identification of materials for which recycling markets exists
- Provision of cost-effective strategies for collecting, processing and marketing of materials
- Investigation of emerging technologies, markets and collection methods whereby new materials may be added to the recycling stream
- Utilization of composting of yard waste and/or municipal solid wastes
- Continuation of strong public education efforts thereby increasing public participation in both waste reduction and recycling program efforts
- Annual evaluation of on-going program efforts to determine effectiveness of current methods or approaches

The Plan also fully considers waste reduction techniques and waste-to-energy technologies. The County recognizes that significant waste reduction policies and program efforts are generally beyond local control. Effective implementation of waste reduction programs will require state and federal initiatives. As a strong proponent of such initiatives, the CCSWMD will continue to promote waste reduction through public education and outreach efforts.

Resource recovery and/or waste-to-energy technology has also been pursued by the County since the start-up of the milling station in 1973. The County participated in numerous studies to determine the feasibility of marketing energy recovered from burning solid waste. These studies concluded that a low-level processed solid waste fuel to energy system could be effectively utilized to produce steam for the Great Atlantic and Pacific Tea Company (A&P) facility in Horseheads. A NYS EQBA grant of $2,000,000 was approved to construct such a facility. However, A&P closed its plant and with no purchaser of steam for the facility, the County did not pursue the project. CCSWMD will continue to evaluate the feasibility of waste-to-energy technology within the framework of its comprehensive solid waste management plan.

A land burial/landfill solid waste management technique will always be required in Chemung County for those components of the waste stream that cannot be recycled, composted, or incinerated, including the residuals or by-products of these processes. The County will continue to effectively manage its existing permitted facility and use the techniques outlined in this Plan to prolong its useful site life.
The CC SWMD has played the key role in solid waste management in the County over the past eighteen years and will continue to do so with this Plan. The District has developed extensive expertise in this field and has acquired a thorough knowledge of the communities’ priorities, issues and concerns. This knowledge and expertise will ensure that the Plan continues to meet the County’s future needs. It will also allow the District to continue to plan, design and operate facilities that will meet County and State mandates in order to manage solid waste in a cost-effective and environmentally sound manner. An important aspect of the District’s operation to date has been its financial strategy in which all users of the facilities pay their fair share. Facilities have been and will continue to be financed by a combination of ad valorem taxes (to retire construction debt) and tipping fees (to cover operation and maintenance costs). This strategy will continue to be employed through the integrated management system outlined in this Plan.

D. Current Solid Waste Management Practices

The existing solid waste management practices currently utilized in Chemung County are summarized below.

1. **Collection.** The County does not participate in the collection of solid waste, except to transfer waste from the outlying transfer stations to the milling station and from the milling station to the landfill. Solid waste collection is currently handled by numerous private haulers, individuals, businesses and one municipality. "Curbside" collection of residential waste is the norm throughout the County.

2. **Processing.** The majority of all solid waste in the County is processed at the County operated central milling station located on Lake Street in Elmira. Waste is either delivered directly to this facility or transferred there from one of four (4) satellite transfer stations. Wastes are dumped on the tipping floor and inspected prior to being conveyed to a shear shredder for size reduction process which results in a nominal four inch product. The only wastes that are not processed at this facility include certain special permitted non-hazardous industrial wastes, C&D materials and dewatered municipal sewage sludge. These materials are delivered directly to the landfill by the generator. All wastes processed at the milling station are transferred to the landfill site via three County operated, 65 cubic yard transfer trailers.

3. **Disposal.** Chemung County currently operates a NYSDEC permitted landfill on a 28-acre expansion site immediately adjacent to the original landfill site in the Town of
Chemung. The dual-lined facility incorporates primary and secondary leachate collection and a dual-lined leachate collection pond with truck loading dock facilities to transfer leachate to a County sewage treatment plant. The site has an estimated twenty-year life expectancy.

4. **Household Hazardous Wastes.** There are no household hazardous waste collection/disposal programs currently operating in the County. Certain materials, such as waste oil and automotive batteries are accepted at the milling station for recycling. Other household hazardous wastes (i.e.; paints, paint thinners, herbicides, pesticides, etc.) are not accepted by the CCSWMD. Persons seeking disposal of these materials are referred to NYSDEC guidelines, which essentially suggest full use of the product for the purposes for which it was intended.

5. **Yard Wastes/Composting.** Currently yard wastes mixed with municipal wastes are accepted at the milling and transfer stations. There is no requirement that this material be source separated, nor is it banned from the landfill. Many municipalities also provide leaf pick-up programs. These leaves are "stored" at sites within the respective communities, and hence are not disposed at the landfill. Aside from small homeowner compost operations, there are no major yard waste composting operations in the County.

6. **Infectious Wastes.** No infectious, "red-bag" wastes are accepted at any County facilities. Disposal of these materials is currently handled by incinerators operated by each of the two hospitals in the County (Arnot Ogden and St. Joseph's). Arnot Ogden also accepts these wastes for disposal from participating physicians.

7. **Agricultural Wastes.** Agriculture is a strong, viable segment of Chemung County's economy. However, virtually no agricultural wastes are received at the County facilities. The majority of these wastes are managed on-site at the point of generation.

8. **Septage Wastes and Treatment Plant Sludges.** Septage wastes are either hauled to farm landspeading sites for use as a soil substitute, or they are hauled to the Chemung County Elmira Sewer District's Milton Street sewage treatment plant for processing. Dewatered sludges from this plant and the other County municipal sewage treatment plant are hauled directly to the landfill for disposal.

9. **Non-Hazardous Industrial Wastes.** Non-hazardous industrial wastes are accepted at the County landfill from six County industries and the NYS Dept. of Transportation. Each of these generators maintains an approved 6NYCRR Part 364 permit with the CCSWMD. All wastes are tested to insure compliance with 6NYCRR Parts 360 and 370.
10. **Hazardous Wastes.** Hazardous wastes are not accepted by any County facilities. Any such wastes generated in the County are transferred by permitted hauler to a NYSDEC (or other state) approved disposal facility.

11. **Construction and Demolition Debris (C&D).** The County currently operates a C&D landfill facility at the Chemung landfill site. This facility routinely accepts C&D materials from generators within the County. Contamination of C&D wastes with other solid waste materials is strictly prohibited. Such contaminated wastes will not be accepted at either the milling station or the landfill facility.

12. **Recycling.** The CCSWMD has completed and received approval of a Comprehensive Recycling Analysis (see Appendix C). This document outlines the County’s recycling plan which is consistent with the State Solid Waste Management Plan goal of 10 percent waste reduction and 40 percent waste recycling by 1997. Although full-scale recycling efforts will not begin until mid-1991, the county has several initiatives underway. These initiatives include the following:

- County-wide office paper recycling program
  - Up to 9 tons/month

- Separation and recycling at Milling Station (Between 2,800 and 3,500 tons in 1990)
  - SCRAP ALUMINUM
  - AUTOMOBILE BATTERIES
  - WASTE OIL
  - BULK/WHITE GOODS

The CCSWMD primary focus in recycling to date has been in multi-faceted educational and outreach programming. During the spring of 1989, the CCSWMD formulated a four-pronged outreach program, directed at the following groups:

1) Government and elected officials
2) The business and commercial sectors
3) The media, schools and general public
4) Environmental groups

Efforts include radio and television PSA’s, paid advertisements, presentations to civic, religious, service and education groups plus provision of recycling curricula to the schools. In addition to specific County efforts, it is estimated that 11,000 tons of material is voluntarily recycled by the business sector annually.
A major component in the County Recycling Plan involves the construction and operation of a MRF. The construction of this facility, which was designed and permitted in 1989 was just recently completed. The processing equipment is currently being installed in this 21,500 square foot structure. Recycling operations are planned to commence at the facility by June 1991, with a 75 TPD capacity during a standard eight hour shift. For the design year, approximately 55 percent of the total recyclable stream handled by the MRF is estimated to be comprised of paper including newsprint, corrugated, office and junk mail. The remainder of the material will be a commingled stream of aluminum, bi-metal cans, metals, glass and plastics. In all, over twenty-five products are planned to be recycled through this comprehensive recycling system.

The facility design is such that the capacity could easily be doubled by adding a second shift. This expanded capacity would be sufficient to meet the potential recycling demands of adjoining counties. With this in mind, the CCSWMD staff approached five adjoining counties to request consideration of the MRF's use in their recycling efforts. To date, none of the counties have responded favorably.

E. Environmental Setting

1. Planning Area Description. The planning area considered in the Plan encompasses the entire area of Chemung County. Chemung County comprises some 412 square miles (263,680 acres) located in the central southern tier of the State. It consists of eleven towns, five villages and the city of Elmira. The County is primarily rural in nature, with more than 85% of its total area devoted to agriculture, forests, brushland and other open space. The region's topography has played a major role in the existing land use patterns. The urbanized/developed areas of Elmira, Horseheads, Big Flats, Southport, are concentrated in the broad valleys of the Chemung River, and Newtown and Seeley Creeks. Major state and local highway networks also parallel these watercourses with NYS Route 17 providing the major east-west link and Routes 13 and 14 the north-south linkage. The County's population has declined over the past thirty years to a low of 95,000 in 1990. This population trend has mirrored the County's economic climate over the years.

2. Solid Waste Generation and Inventory. In 1989 the annual mixed solid waste generation rate in Chemung County was slightly greater than 57,000 tons. Added to this total was approximately 17,000 tons of C&D material and 31,000 tons of foundry sand and sewage sludges, for a total solid waste generation rate of 105,000 tons of solid waste materials handled by the County.
This municipal solid waste (MSW) generation rate is expected to increase slightly through the 1990's and stabilize at 118,000 tons per year by the year 2000. This translates to approximately 1,470 pounds of MSW per person per annually (almost a 10% reduction over 1990 estimates of 1,630 pounds of MSW/person).

3. **Composition of Existing Solid Waste Stream.** A detailed solid waste composition study conducted in 1989 indicates that 60 percent of the waste stream, or approximately 34,000 tons originated from residential sources and 40 percent or 23,000 tons from commercial sources. Paper products were the largest single component of the waste stream, followed by organics (i.e.; food, yard and wood wastes), plastics, metals, diapers and glass.

The results of the composition study indicate that overall between 30 to 70 percent of the County's solid waste stream is potentially recyclable given current technology. These potentially recyclable waste categories include the following:

| □ glass (three colors) | □ tires |
| □ newsprint | □ office and computer paper |
| □ yard waste | □ junk mail |
| □ aluminum | □ batteries (household and auto) |
| □ ferrous | □ C & D material |
| □ non-ferrous metals | □ appliances |
| □ cardboard | □ sludge |
| □ plastic | □ household hazardous waste |
| □ magazines | □ waste oil |
| □ five-cent deposit containers | □ ceramics |
| □ waste oil | □ cereal boxes |

**F. Technology Assessment/Evaluation of Alternatives**

To determine the appropriate components of an integrated solid waste management system for the County, the Plan fully assesses alternative waste technologies. Those technologies addressed include various techniques to; reduce waste, recycle and reuse waste, compost, and convert waste to energy. An outline of the specific items under consideration in the Plan includes the following:
WASTE REDUCTION
Description/Evaluation of Alternative Waste Reduction Methods

RECYCLING AND REUSE
Materials to be Recycled
Alternative Sorting Approaches
Collection of Solid Waste
Public Education and Enforcement
Material Recycling Facilities
Chemung County’s MRF

COMPOSTING
Description of Composting Technologies
Yard Waste Composting
Municipal Solid Waste Composting
Sewage Sludge Composting
Other Compost Related Considerations

WASTE-TO-ENERGY
Mass Burn
Modular Combustion Units
Refuse Derived Fuel
Fluidized Bed Combustion
Pyrolysis
Biogasification
Waste To Energy Considerations For Chemung County

LANDFILL/DISPOSAL
Description of Technology
Alternatives to Conventional Landfill Technology
Future Plans for the Chemung County Landfill

With the exception of the waste-to-energy alternatives, elements of all of these technologies are incorporated in the County’s integrated solid waste management system. The waste-to-energy alternative is not considered feasible at this time due to lack of a market for the energy generated and hence the high system costs. If at some time in the future such a market is identified, the County will reassess the appropriateness of incorporating this technique in the integrated system.
G. Institutional and Financial Arrangements

Implementation of an integrated solid waste management system will require a somewhat complex institutional arrangement that has the legal, fiscal and physical ability and powers to implement the various facility, programming, coordination, regulatory and financial aspects of the system. Several potential alternative, institutional arrangements capable of this complex inter-relationship were analyzed in the plan including the following:

- County ownership and operation - District
- County Solid Waste Management Authority
- Joint County and Local Municipal ownership
- Joint County and private ventures
- Private ownership and operation

As a result of the County’s long standing involvement in solid waste management, Chemung County currently owns and operates all solid waste disposal and management facilities under its jurisdiction. There are no other public (municipal) or private facilities in operation and/or planned. Although the authority exists for the County and/or municipalities to enter into inter-municipal agreements that could satisfy the institutional requirements of an integrated system, with no municipal entities now involved with solid waste management, the County is the most appropriate level of government to address such an integrated solid waste management system. This somewhat limits the field of alternative institutional arrangements to County ownership and operation via a district or authority, and private ownership and operation.

The same argument can be made for private involvement as for municipal involvement. The County did evaluate the appropriateness of contracting for services/operation of the MRF. However, given their long standing and successful track record with the operation of the milling station, the policy decision was made to operate the facility in house. The fact that the County currently owns all of the facilities also significantly reduces the opportunity for return to a private vendor by limiting their contract to service/operation with no potential for charging facility ownership costs.

This leaves the only potentially appropriate option to the existing County ownership and operation via the CCSWMD to be a County Authority. Such an authority would be an autonomous agent, not an agent or arm of the County Legislature as is the District. The only significant difference in powers is the ability to bond directly, without having legislative
involvement as is the case currently. The District must now request that the legislature bond any new and/or increase in facilities. In its eighteen year history the County Legislature has never failed to provide the bonds/financing necessary to meet the District's operational and capital improvement needs. Thus this power does not appear to be so critical to the success of the integrated system's implementation to warrant a change in the management scheme. Especially a change that would not likely be politically acceptable to the County legislature.

Chemung County's Plan also evaluated several potential sources of capital funding, including: General Obligation Bonds, Revenue Bonds, Tax Exempt Industrial Development Bonds and private lease financing. While all of these are viable financing mechanisms for the County's use in capital projects, general obligation bonds have proved to be the best option in past projects. This is due in part to the inherent low risk nature of these bonds and in part to the County's excellent bond rating and low debt ratio. Absent major changes in this situation, the County will continue to use general obligation bonds to finance capital expenditures and thus an ad valorem tax to retire debt.

The second aspect of financing relates to the cost allocation and recovery methods for operation and maintenance. The premise of the CCSWMD is that operation and maintenance costs must be assessed equitably among the various users of the system. To this end the County has employed a weight based user charge rate structure. Weigh scales are in place at the milling station and the landfill to weigh wastes as they enter the facilities. Each user is billed at the rate per weight of material delivered to the facilities.

The total costs of the Chemung County Integrated Solid Waste Management System will include costs for the operation and maintenance of all facilities, administrative costs, reserve fund costs for closure and post closure of landfill facilities, and debt service costs. All but the debt service costs will continue to be allocated on a user fee rate that is weight based and directly linked to the benefit derived by the user. Capital expenditures and associated debt service will be covered through general obligation bond sales and retired through an ad valorem tax.

The Plan, therefore, concludes that the CCSWMD has the legal, fiscal, facility and staff standing to implement the Integrated Solid Waste Management System and is the appropriate institutional arrangement to do so.

H. Integrated Solid Waste Management System

As noted earlier, Chemung County has been involved in a comprehensive approach to solid waste management since 1971 when a county-wide district was established to manage all solid waste generated in the County. The CCSWMD has over the years kept
abreact of changing technologies and issues in the solid waste management arena. The District has operated an effective, environmentally and financially sound solid waste management system in the County. It has the authority and expertise to implement the integrated solid waste management approach outlined in this Plan. And in fact, has begun implementation of many aspects of this integrated plan even as it was being developed.

The Chemung County Integrated Solid Waste Management System as outlined in this Plan is designed to address all of the solid waste issues that the County will face for the next twenty years. These issues are foreseen as including, increasing quantities of solid waste generation, changing solid waste stream composition, increasing costs of management/disposal, dwindling disposal options, increasing competition for recyclable markets, and dynamic technology advancements related to solid waste management and processing recyclables. The integrated system as outlined responds to these solid waste management issues in a comprehensive fashion, including coordination and consideration of both public and private sector factors. It's clear policy guidance remains as stated in 1988:

**TO ACHIEVE A SOLID WASTE MANAGEMENT SYSTEM TO MEET THE NEEDS OF THE COUNTY, THAT IS TECHNICALLY, ENVIRONMENTALLY AND FINANCIALLY SOUND.**

The Integrated Management System outlined in the County Plan sets forth cost-effective management options for handling the County's solid waste stream, through public and private sector cooperation in its implementation. The integrated system optimizes existing facilities, while being flexible enough to allow incorporation of new private sector solutions where they will realistically meet program needs. While the system's primary focus is on meeting the County's solid waste needs, it also provides flexibility in accommodating future opportunities for regional efforts. The Plan encourages and supports practices that will reduce solid waste from all sources; it mandates recycling of all economically feasible segments of the waste stream and provides for environmentally sound disposal of residuals. It also incorporates a self-analysis component that will allow the CCSWMD to effectively assess the success of its implementation and redirect efforts where and when appropriate. Finally, the Plan recognizes that to truly be successful, a strong public education and participation element is essential. The Integrated Solid Waste Management System for Chemung County involves a number of components, as listed below; all of which are necessary for its successful implementation.
A. SOLID WASTE MANAGEMENT FACILITIES:

× Continuation of implementation of the planned and permitted 4-cell landfill expansion in Lowman, New York

× Completion and operation of MRF

× Closure of existing C&D Landfill Site

× Remediation of Landfill Area 3 in conjunction with development of a new permitted C&D landfill site (ON TOP OF AREA 3)

× Construction and permitting of a yard waste composting facility

B. PROGRAM EFFORTS - WASTE REDUCTION, REUSE AND RECYCLING:

▼ Implementation of a county-wide yard waste recycling/composting program

▼ Implementation of wood recycling and volume reduction program for C&D wastes at landfill

▼ Continuation of public education programming efforts with respect to waste reduction, and proper source separation and recycling procedures

▼ Coordination with Chemung County Sewer District and NYSDEC to improve sludge quality for re-utilization as final cover, topsoil substitute at landfill

▼ Evaluation of special waste streams to develop reuse options and reduce volume requiring disposal at landfill

C. COORDINATION/EDUCATION EFFORTS:

● Coordination of private sector to evaluate effectiveness of recycling efforts

● Coordination with private sector to identify opportunities to provide improve County systems

● Coordination with adjoining counties to identify opportunities to provide regional programming and management services

● Support state and federal efforts in waste reduction legislation
D. INSTITUTIONAL MEASURES:

- Continuation of Chemung County Solid Waste Management District as County solid waste management agency - responsible with authority to promulgate appropriate rules and regulations to effectively manage solid waste generated in the County.

- Adoption of amendments to County Solid Waste Management law to implement source separation recycling program efforts through a progressive ban on identified marketable recyclable products in solid waste streams.

E. FINANCIAL MEASURES:

- Continuation of county weight based, solid waste user fee structure.

- Establish a no charge/fee structure for the recyclable portion of the solid waste stream as delivered to the MRF.

- Continuation of Ad-Valorem taxing to retire debt for capital expenditures.

F. MONITORING/SELF-ANALYSIS:

- Development of on-going, annual monitoring program to evaluate effectiveness of program efforts and determine appropriate changes.

A key element that will cross into all aspects of the integrated system will be public information and education efforts. The District has plans in 1991 to significantly expand public education efforts, with a budget of $50,000. These efforts will focus on educating the public to requirements of the source separation and recycling program that will begin in mid-1991. These efforts will continue as this program is expanded to full implementation in 1992. Beyond that, educational and informational programming will continue as appropriate to update County residents and businesses on waste reduction techniques.

There are several components of the County’s total solid waste stream that are not currently managed by the CCSWMD or any other County entity. These include agricultural, infectious wastes and hazardous wastes. The current management structure for these waste streams has been evaluated and found to be sufficient at this time. These waste streams are.
therefore, not proposed to be part of the integrated management system as outlined in this Plan. They will continue to be handled in the private fashion that they are currently.

The one exception is household hazardous wastes. At this time the County has determined that the management of these wastes would be handled in a more cost-effective and environmentally sound manner by the NYSDEC. The County finds that without specific state guidelines and sanctions, the liability and cost of providing County management is prohibitive. The County will consider incorporating the management of this waste stream in this integrated management system if, at some time in the future, the state develops a system to assist them in cost-effective management. Until such time, these wastes will be handled by the individual generator in conformance with NYSDEC guidelines.

As noted earlier, the CCSWMD has already begun to implement certain elements of this integrated system. The Materials Recycling Facility building construction is complete and the installation of the recycling equipment is currently underway. Expanded public education efforts are underway to prepare County residents and business of the upcoming source separation and recycling program requirements. Engineering reports and documentation required for the closure of the existing C&D site and permit for the construction and operation of the new C&D facility at the landfill site are also underway. Initial plans for the location and operation of the yard waste composting facility are awaiting completion of a Newtown Creek floodplain mapping update, which is also underway. Finally, rules and regulations amending the County Solid Waste Management Law to implement the source separation and recycling program are being drafted.

The CCSWMD will, upon adoption of the Plan and thus the Integrated Solid Waste Management System, begin implementation of the remaining program elements including the annual monitoring and self-analysis program.