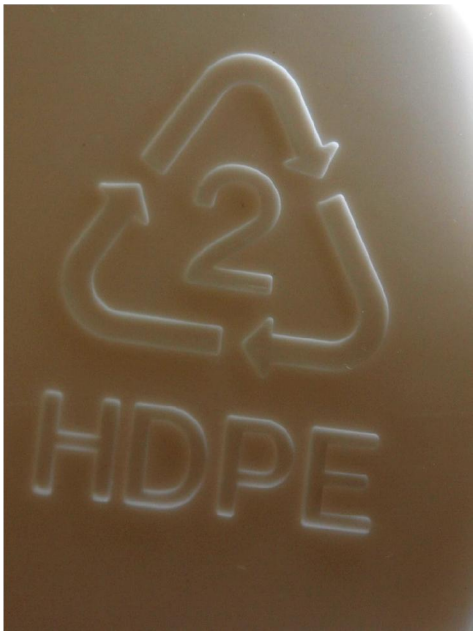
Chemung County

Final Local Solid Waste Management Plan



JULY 2015

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Chemung County

Final

Local Solid Waste Management Plan

July 2015

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Executive Summary and Update to Comprehensive Recycling Analysis

The purpose of the Chemung County Solid Waste Management Plan is to identify the path to be pursued for managing solid waste generated in Chemung County during a ten-year planning period, in an economically and environmentally sound manner that is consistent with the State's solid waste management policy and the requirements of 6 NYCRR Part 360-15 pertaining to local solid waste management plans. The ten-year planning period will be 2016-2025.

The residents, businesses, industries, and institutions in Chemung County generate solid waste every day. The question about how to increase recovery, to decrease disposal, and to reduce waste generation, now and in the future, creates the need for a plan such as this one.

The purpose of the Local Solid Waste Management Plan (LSWMP) is to: 1) serve as a countywide framework for the coordination of solid waste management; 2) establish countywide solid waste goals and objectives -- including goals for waste reduction, recycling, and energy recovery -- and a plan to monitor progress toward the goals; and 3) satisfy NYSDEC requirements for solid waste planning and comprehensive recycling analyses.

Chemung County serves as the solid waste planning unit for all municipalities within the County. This LSWMP recognizes, however, that local municipalities, the New York State Department of Environmental Conservation (NYSDEC), private waste haulers, neighboring solid waste planning units, and private facility owners all play important roles in Chemung County's current and future management of solid waste and recyclable materials.

The County owns one (1) central landfill comprised of an operational municipal solid waste (MSW) and construction and demolition debris (C&D) landfill in the Town of Chemung and a transfer station/materials recovery facility (MRF) in the City of Elmira, which is currently operated as a consolidation center for waste and recyclable materials that are trucked off-site for disposal at the landfill and processing at a MRF, respectively. Both are operated by New England Waste Services of N.Y., Inc. (NEWSNY) a subsidiary of Casella Waste Systems. Additionally, NEWSNY operates four (4) residential waste and recyclables drop-off stations in the Towns of Big Flats, Lowman, Erin, and Southport. These facilities deliver their collected waste and recyclables to the County MRF or the Chemung County Landfill. Generators and haulers are not required to deliver waste or recyclables to the County facilities and businesses may self-market their recyclables. Therefore, not all waste and recyclables pass through the County facilities. It is currently estimated that slightly more than 80% of the MSW and nearly 70% of the C&D debris is managed outside of the County.

Given the rural nature of Chemung County, a limited variety of collection services are used in the County to collect and transport solid wastes to landfills and recycling centers/transfer stations. Methods include residential drop-off stations or private contracts. Most entities transport their waste and recyclables directly to the landfill or transfer station for proper management by the County's private contractor. Chemung County does not collect or transport materials from the source. In some cases, private haulers contract on an individual basis to collect and transport the waste and recyclables to a transfer station or disposal location of their choice. The City of Elmira is the only municipality within Chemung County that offers municipally run collection of garbage and recycling. All residential properties located within the City of Elmira receive garbage collection unless the property owner has opted out of the service. Households pay an annual fee per unit, which is billed and collected along with their city taxes. Households are permitted to dispose of a maximum of three (3) bags of waste per week under the condition that each bag weighs 30 pounds or less. Commercial properties are not automatically enrolled, but may opt in to the program at any time. All participants may opt-out of the program at any time. This program is also contracted out by the City of Elmira to residents living in Elmira Heights.

The Solid Waste Management Act of 1988 established a State Solid Waste Management Policy. The policy defines the following solid waste management priorities in New York State:

- first, to reduce the amount of solid waste generated;
- second, to reuse material for the purpose for which it was originally intended or to recycle material that cannot be reused;
- third, to recover, in an environmentally acceptable manner, energy from solid waste that cannot be economically and technically reused or recycled; and
- fourth, to dispose of solid waste that is not being reused, recycled or from which energy is not being recovered, by land burial or other methods approved by the Department (from New York State Environmental Conservation Law (ECL) 27-0106.1).

NYSDEC issued a statewide SWMP in December 2010, *Beyond Waste: A Sustainable Materials Management Strategy for New York*. It defines broad statewide objectives for waste reduction, reuse and recycling, waste-to-energy, landfilling, and special issues consistent with the State Solid Waste Management Policy. The quantitative goal of *Beyond Waste* is to reduce the amount of waste New Yorkers dispose by preventing waste generation and increasing reuse, recycling, composting and other organic material recycling methods. Based on the data gathered and compiled for this LSWMP, the County has identified program strategies to work toward during a ten-year LSWMP planning period that is consistent with the State Solid Waste Management Policy. The strategies set forth below were identified with the goal of

further enhancing the reuse and recycling of materials generated in Chemung County and providing for the means to recover energy in an environmentally sound manner from solid waste that has not been reused or recycled. Each strategy and corresponding goal will be evaluated for feasibility and cost effectiveness on an individual basis according to the implementation schedule included in Chapter 7.0.

Program Strategy #1 – Increase Recycling at County Facilities
Goal: Increase recyclables recovery at County owned and/or operated facilities.

Program Strategy #2 – Construction & Demolition Debris Recycling
Goal: Increase diversion of C&D or remodeling debris from the landfill.

Program Strategy #3 – Product Reuse Collection and Distribution Programs
Goal: Promote product reuse to increase waste diversion.

Program Strategy #4 – Product Stewardship Framework
Goal: Shift government funded waste diversion to one that relies on product stewardship.

Program Strategy #5 – Household Hazardous Waste (HHW) Collection
Goal: Increase collection rates and divert more HHW materials from disposal and wastewater facilities.

Program Strategy #6 – Expand Mercury Collection Program
Goal: Provide residents with a convenient and safe method of disposal of mercury containing devices.

Program Strategy #7 – Expand Mandatory E-Waste Recycling Program
Goal: Educate residents of proper E-waste recycling programs.

Program Strategy #8 – Pharmaceutical Education Program
Goal: Educate residents of proper pharmaceutical management to reduce the instances of improper disposal or flushing.

Program Strategy #9 – Support Yard Waste Composting Efforts
Goal: Encourage yard waste composting to increase diversion of yard waste from the solid waste disposal stream.

Program Strategy #10 – Promote Backyard Composting through Education and Training Programs
Goal: Encourage backyard composting to divert more food and yard waste from the solid waste disposal stream.

Program Strategy #11 – Management of Organics
Goal: Increase diversion of food and yard waste requiring disposal, as well as increase diversion of biosolids.

Program Strategy #12 – Monitor Management of Animal Mortalities
Goal: Monitor success of Cornell Waste Management Institute (CWMI) and New York State Department of Environmental Conservation (NYSDOT) research methods for the management and composting of animal carcasses.

Program Strategy #13 – Agricultural Plastics Program
Goal: Support the current and potential expansion of the agricultural plastics recycling program through the Chemung County Soil & Water Conservation District.

Program Strategy #14 – Public Outreach and Education
Goal: Educate waste generators to increase recycling and waste diversion and reduce improper disposal of materials.

Program Strategy #15 – Green Business Recognition Program
Goal: Recognize businesses that are committed to increasing their waste diversion rates and working towards recovery goals consistent with the County's LSWMP.

Program Strategy #16 – Improving Solid Waste and Recycling Data Compilation
Goal: To obtain a more complete data set to assist with the implementation of the program strategies.

Program Strategy #17 – Separation and Segregation of Recyclables or Reusable Material Law Revision
Goal: To review and modify the Separation and Segregation of Recyclables or Reusable Material Law.

Program Strategy #18 – Pay-As-You Throw (PAYT) Program
Goal: Evaluate the feasibility of PAYT programs during review/update of the Separation and Segregation of Recyclables or Reusable Material Law.

Program Strategy #19 – Continue Landfilling as Primary Disposal for all Non-Recyclable/Recoverable Waste
Goal: Maintain a reliable, environmentally-sound means of disposal for non-recyclable/non-recoverable waste generated within the County.

Update to Comprehensive Recycling Analysis

Set forth below is a listing of the seven main requirements for a Comprehensive Recycling Analysis (CRA) as set forth in 6 NYCRR 360-1.9(f). Next to each CRA component is a reference to where information related to that portion of the CRA can be found in this LSWMP.

1. Identification of the actual or estimated quantity of recyclables, by type, that could potentially be recovered.
    a. Addressed in Chapters 2, 6 and 7 and Appendices A, C and D.
2. An evaluation of existing efforts to recover recyclables.
    a. Addressed in Chapters 1, 2, 3, 6 and 7 plus in Appendices A, C and D.
3. Identification of available and potential markets for recovered recyclables.
    a. Addressed in Chapters 1, 2, 3, 6 and 7 plus in Appendices A, C and D.
4. Identification of alternative source separation/recyclable recovery programs considered, the proposed program and reasons for selection of the proposed program.
    a. Addressed in Chapters 2, 3, 5, 6 and 7.
5. Recyclables recovery program implementation.
    a. Addressed in Chapters 6 and 7 plus Appendix A.
6. Legal/institutional analysis.
    a. Addressed in Chapters 1, 3, 6 and 7 plus Appendix B.
7. A discussion of possible future actions in the facility's service area to further the objectives of the State's solid waste management policy identified in section 27-0106 of the ECL.
    a. Addressed in Chapters 2, 4, 5, 6 and 7 plus Appendix A.

Chapter 1 - Planning Unit Description

1.1 Size, Location, Population

1.1.1 Physical Setting

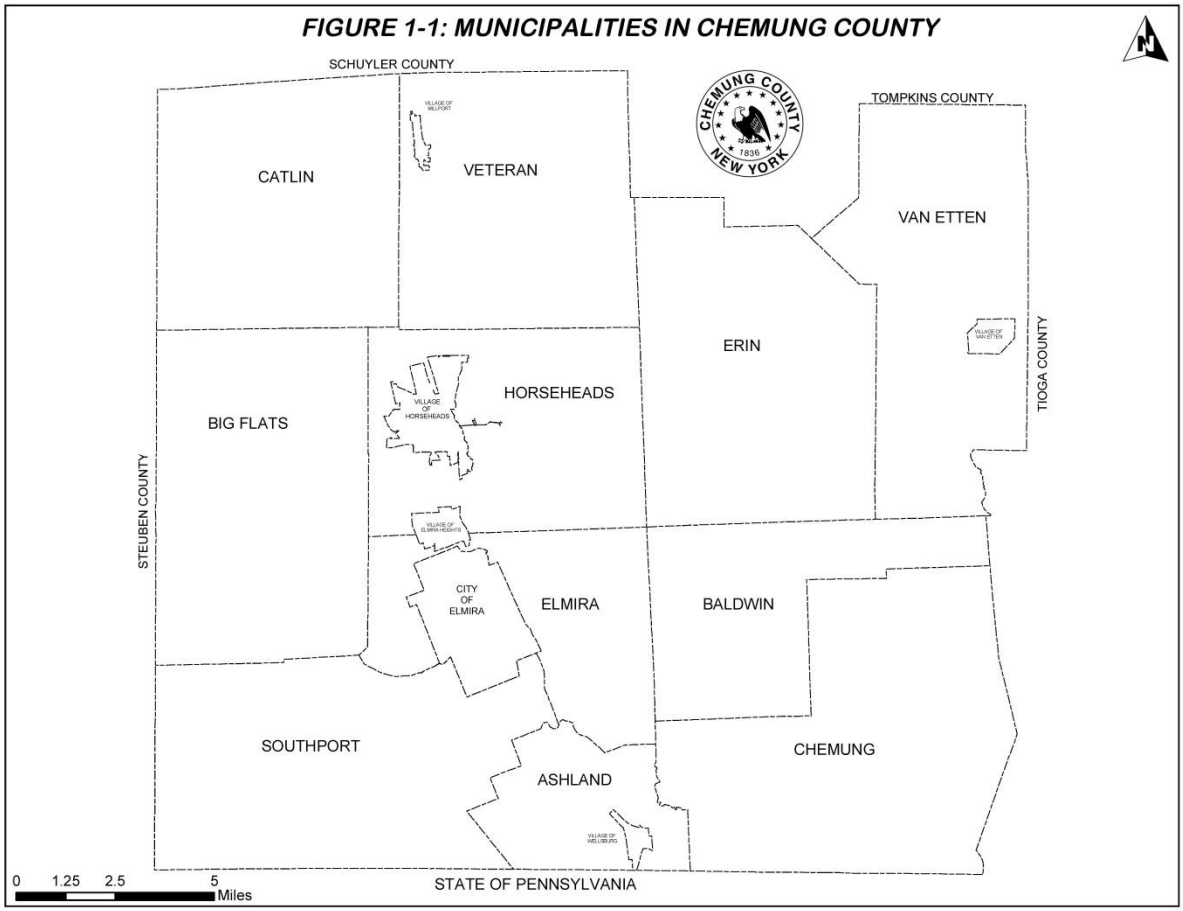
Chemung County is located on the New York-Pennsylvania State border in the geographic area known as the Southern Tier of New York State. As shown on Figure 1-1, Chemung County is bordered by Schuyler County to the north; Tompkins County to the northeast; Tioga County, New York to the east; Bradford and Tioga Counties, Pennsylvania to the south; and Steuben County to the west. The County is located approximately 55 miles west of Binghamton, 18 miles east of Corning, 100 miles southwest of Syracuse, and 110 miles southeast of Rochester. Major highways serving Chemung County include Interstate Highway 86 (N.Y.S. Rt. 17), which links Chemung County with Corning, Binghamton, and New York City on an east-west corridor, and by New York State Routes 13, 14, 223, 328, 352, and 427, which link Chemung County with neighboring counties to the north and south.

Chemung County has a land area of 408 square miles with a population density of 223 per square mile (sq mi). The County's population is approximately 34.5% rural, with approximately 65.5% characterized as suburban. The relatively small City of Elmira is the only city located within the County[1]. The remainder of the County is largely rural, consisting of farmland, forested hills, and surface water bodies, including the Chemung River. Chemung County is currently designated as the Elmira, N.Y., Metropolitan Statistical Area by the U.S. Census Bureau.

Chemung County was incorporated in 1836 and it is currently governed by a County Executive and a fifteen-member County Legislature. Chemung County's political subdivisions consist of eleven towns (Ashland, Baldwin, Big Flats, Catlin, Chemung, Elmira, Erin, Horseheads, Southport, Van Etten, and Veteran), the City of Elmira, and five villages (Elmira Heights, Horseheads, Millport, Van Etten, and Wellsburg). The City of Elmira, incorporated in 1864, serves as the Chemung County seat. A map displaying the County's municipal jurisdictions is presented in Figure 1-1.

[1] U.S. Census, 2010.

Figure 1-1 Municipalities in Chemung County



Source: Chemung County

1.1.2 Neighboring Planning Units

Table 1-1 lists the neighboring planning units along with possible opportunities for inter-jurisdictional programs or issues that may impact implementation of the County's LSWMP and achievement of its goals. Further evaluation of these opportunities or potential impacts will be discussed in Chapter 6, and tasks will be included in the Implementation Schedule.

Table 1- 1 - Potential Impacts or Opportunities with Neighbors That Could Affect LSWMP Implementation

Neighboring Planning Unit	Existing or Potential Inter-Jurisdiction Considerations/Impacts	Effects of Opportunities or Impacts to Implement the LSWMP
Tioga County[2]	Tioga County offers a municipal collection service for recyclable materials to County residents. A privately owned and operated single stream recycling facility is located within the County. A privately owned and operated transfer station in the Town of Barton is available for use by County waste generators. Residents may drop off their solid waste at the Tioga Waste Management Facility in Owego or contract with a private hauler for curbside pick-up. Most solid waste is reportedly disposed at the Chemung County Landfill by private haulers. A HHW facility in Broome County is available to Tioga County residents.	Chemung County Landfill manages a portion of the waste generated in Tioga County.
Tompkins County[3]	Tompkins County has entered into a contract with a private hauling company to provide residential curbside collection of recyclable materials in all municipalities within the County. Residents may contract with private haulers for waste collection or they may drop off their waste at the Recycling and Solid Waste Center (RSWC). All solid waste set out for curbside collection must have a trash tag affixed to the bag or can. The County also charges a Solid Waste Annual Fee, based on a schedule of rates per residence and non-residence, to help pay for its solid waste management and recycling programs. Waste disposal takes place at privately operated disposal facilities located outside of Tompkins County. The RSWC only accepts waste from in county residents, businesses or haulers. The County	Source of information for examples of funding, data collection and public outreach programs.

[2] http://www.tiogacountyny.com/departments/public-works/solid-waste.html
[3] http://recycletompkins.org/

Neighboring Planning Unit	Existing or Potential Inter-Jurisdiction Considerations/Impacts	Effects of Opportunities or Impacts to Implement the LSWMP
	contracts with Cayuga Compost for organics management. The Division of Solid Waste in Tompkins County's Department of Public Works has 13 full time employees. Private haulers are required to be licensed and provide annual collection data reports.	
Schuyler County	The collection and disposal of municipal solid waste within Schuyler County has historically been and is anticipated to continue to be primarily handled by the private sector. Haulers transport the waste to out of county landfills/transfer stations. Each municipality also contracts independently for recycling services for their residents with the exception of the Towns of Cayuta, Catharine and Montour who offer one central recycling drop-off center for the residents of all three (3) towns. Of the five (5) haulers offering recycling service, three (3) offer single stream collection while the others offer source separated collections. [4]	Chemung County Landfill manages a portion of the waste generated in Schuyler County. Pesticide containers are collected from Chemung County area farmers through the USAg Recycling program twice a year. This is coordinated with Schuyler County.
Steuben County	Steuben County owns and operates a landfill and three (3) transfer stations in the towns of Hornell, Erwin and Wayland all of which have recycling facilities. The County's landfill accepts some waste under agreement from Tioga County and the Town of Middleton in Orange County. Waste in the County is collected by private haulers and is not required to be disposed at the County's landfill. The majority of the County's waste (57 percent), is disposed at the County's landfill with (40 percent) disposed at the Hyland Landfill in Allegany County. A large private C&D debris landfill is also located in the County which accepts waste from a broad service area across the State as well as from out of state. All recyclables received are processed and marketed to private processors through a private vendor. Funding for the program is derived from landfill tipping fees.[5]	None noted.

[4] Schuyler County Countywide Comprehensive Plan, May 2014.
[5] NYSDEC Beyond Waste Planning Unit Profiles, 2008.

1.1.3 Population and Number of Households in the Local Planning Unit[6,7]

According to the U.S. Census data for 2010, Chemung County's population is approximately 88,830, and is distributed over one (1) City, five (5) villages and 11 towns, with 35,462 households. Chemung County's population decreased from 91,070 in 2000 to 88,830 persons in 2010, a decrease of 2,240 persons. According to Cornell University's Program of Applied Demographics, the population of Chemung County is projected to decrease by 11,884 persons to 76,946 persons by the year 2040.

1.2 Planning Unit Members

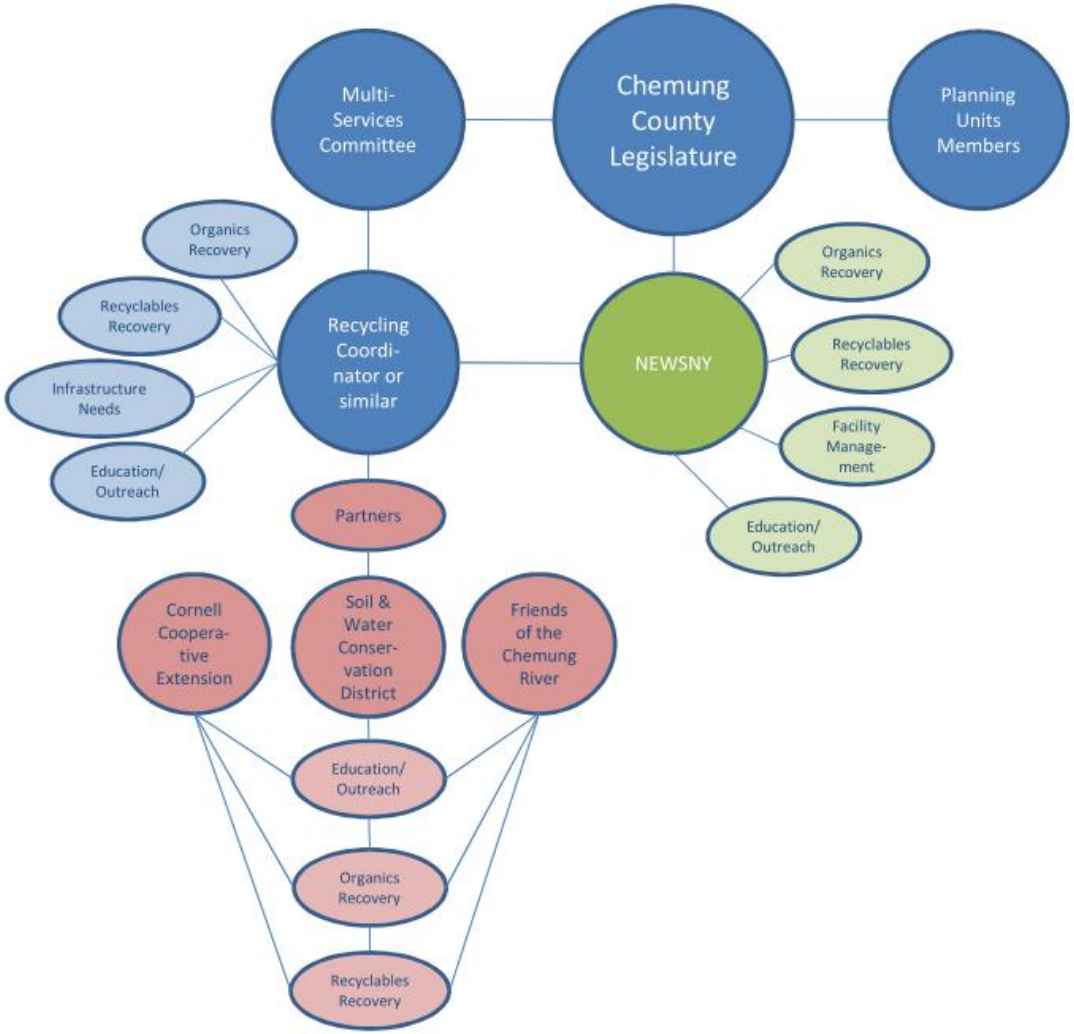
Chemung County will draw upon its existing administrative structure to implement the programs and objectives outlined within this Plan. The Chemung County Legislature is comprised of 15 elected legislators representing the 15 legislative districts within the County. The legislature is the legislative, appropriating, and policy determining body of the County.

The County Executive is the chief elected official in the County and the administrative head of the County government. He also serves as the Chief Budget Officer of the County and is responsible for preparing the operating and capital budgets of the County for presentation to the Legislature for approval.

Ultimately the County is responsible for implementation of this Plan. The County may delegate tasks to other partners (i.e., NEWSNY, Cornell Cooperative Extension, Soil and Water Conservation District) due to the nature of the contract, relationship or partnership. Any such delegated task may be assigned with County oversight. Figure 1-2 depicts the administrative structure to be utilized for implementing the programs and objectives outlined in this Plan.

[6] U.S. Census, 2010.
[7] Cornell University's Program of Applied Demographics, 2010.

Figure 1-2 LSWMP Administrative Structure



1.2.1 Planning Unit Membership and Impacts on Implementing LSWMP

Table 1-2 includes a list of the planning unit members as well as conditions that pose a significant impact to implementing the LSWMP and achievement of the LSWMP goals. Currently, the members are not involved in preparing or implementing the plan; however the members could play a significant role in the gathering of information and numbers of materials collected and recycled within the towns, at various businesses, schools, and other recycling facilities. The significant impacts are discussed further in Section 1.4 of this chapter. Additionally, more details related to organic waste management is provided in Table 3-3 in Chapter 3.

Table 1- 2 – Planning Unit Membership

Municipal Member	Population Density – Character[8]	Role in LSWMP Preparation	Role in LSWMP Implementation	Unique Conditions or Issues[9]
Towns				
Ashland	138/sq mi rural	None	Data collection, network with schools and education outreach program	Private haulers contract directly with residents for waste and recycling collection.
Baldwin	33.1/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling collection.
Big Flats	162/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling collection. Residential drop-off facility available. The Town offers an organic yard waste/trimmingsdrop-off to all Big Flats residents. Located next to the Community Center Parking Lot. Christmas Tree collection is provided by the Town during the holiday season.
Catlin	69.7/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling collection.

[8] Census 2000 Summary File 1 (SF 1), U.S. Census Bureau
[9] Further evaluation will be completed as part of Program Strategy #16 discussed in Chapter 6.

Municipal Member	Population Density – Character[8]	Role in LSWMP Preparation	Role in LSWMP Implementation	Unique Conditions or Issues[9]
Chemung	53.9/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling collection. The Chemung County Landfill is located on County Route 60 in the Town of Chemung. Residential drop-off facility available in Lowman.
Elmira	323/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling collection. The Highway Department picks up leaves during the fall. A compost facility is located at the Town of Elmira Highway Garage 1890 W. Water Street, and is open from 7:00 AM until 3:30 PM Monday through Friday and 8:00 AM until 12:00 P.M. on Saturdays except Holidays.
Erin	46.3/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling collection. Residential drop-off facility available.
Horseheads	546/sq mi suburban	None	Same as above	Private haulers contract directly with residents for waste and recycling collection.
Southport	240/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling program. Residential drop-off facility available.
Van Etten	36.5/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling collection.
Veteran	85.1/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling collection.
Villages, City				
Elmira Heights	3,665/sq mi suburban	None	Same as above	In June of 2005, the Village of Elmira Heights and the City of Elmira signed an agreement whereby the City would collect the residential waste and recyclables generated by the Village. The refuse collection is self-sustained by the garbage sticker program. Residents can buy the stickers at the Clerk's Office for

Municipal Member	Population Density – Character[8]	Role in LSWMP Preparation	Role in LSWMP Implementation	Unique Conditions or Issues[9]
				$2.00 each. Each household can put out a maximum of three (3) bags up to 30 lbs each. For everyone, the recycling materials are collected without any charges to the Village residents. Once a year, in April, branches are collected throughout the Village. The Street Department utilizes a wood chipper for that purpose.
Horseheads	1,666/sq mi suburban	None	Same as above	Private haulers contract directly with residents for waste and recycling collection.
Millport	821/sq mi suburban	None	Same as above	Private haulers contract directly with residents for waste and recycling collection.
Van Etten	669/sq mi suburban	None	Same as above	Private haulers contract directly with residents for waste and recycling collection.
Wellsburg	631/sq mi suburban	None	Same as above	Private haulers contract directly with residents for waste and recycling collection.
Elmira – City[10]	4,229/sq mi suburban	None	Same as above	All residential properties in the City of Elmira receive garbage collection unless the property owner has filed an opt-out or exemption form in the Assessor's Office. Recyclables collection is also included in the weekly pick up. The City of Elmira maintains a compost facility at its Public Works site. Each fall the City will collect leaves in bulk at the curb. Residents may rake their leaves to the curb (but not into the street) for pickup by City crews. The bulk pick-up program typically runs from late-October to early December. For excessive yard wastes, residents can use the Dial-A-Truck program or the compost site, located at the City Yards. Residents may also bring their waste to the Chemung County landfill directly or the Transfer Station located on Lake Street, just north of Sullivan Street.

[10] http://www.cityofelmira.net/public-works/sanitation

1.3 Seasonal Variations and Unique Circumstances

There are several seasonal variations which occur within Chemung County which could affect implementation of the LSWMP and achievement of its goals.

- Spring is a large cleanup time and influx of brush, downed trees, lawn debris, and scrap metal from residences. The impacts and effects of these wastes are discussed in Section 1.4.1.
- Summer brings the end of the school year, and brings with it cleanout wastes from lockers, equipment left behind, and wastes from any remodels or construction projects at schools and colleges, as well as agricultural clean ups. The impacts and effects of these wastes are discussed in Section 1.4.2.
- There are also many large events held within the County during the year, including Chemung County Fair, various farmers' markets, Tag's Outdoor Summer Concert Series, and several others listed in Table 1-7. The impacts and effects of these events are discussed in Section 1.4.4.
- Summer also brings an increase of yard wastes, agricultural wastes and cleanups, as well as garden wastes which could all be composted. The impacts and effects of these wastes are discussed in Section 1.4.1.
- Waste water treatment plants bring their sludges to the Chemung Landfill throughout the year, which requires special handling at the landfill.
- Fall brings the return of students to school and college. With this brings new electronics, books, etc. This also brings a larger amount of food wastes. All school and college wastes are managed by private haulers and no generation or recovery data is available. The impacts and effects of these wastes are discussed in Section 1.4.2.
- There are public libraries within the County. Potential recycling options for waste/recyclable materials generated at libraries are discussed in Section 1.4.3.
- Winter is the slower season for wastes being brought to the landfill. This is due in part to the reduction of wastes from large scale events.
- There are a number of large manufacturers, small manufacturers, businesses, nursing homes, jails and other institutional facilities which manage their own waste and recyclables. Recycling activities and data for these facilities are unknown. Recycling programs and data collection will be discussed in the Solid Waste Management Program Strategies in Chapter 6. Tasks will be included in the Implementation Schedule to evaluate and implement new or improved recycling programs, including packaging and organics recovery, and to collect data.

1.4 Overview of Solid Waste Generation Sources within Chemung County

The majority of Chemung County's industrial, commercial, retail, institutional, and governmental facilities are located within the I-86 transportation corridor. Major employment centers within the County are concentrated in the Towns of Big Flats, the Village and Town of Horseheads, the City of Elmira, the Village of Elmira Heights, the Town of Southport, and the Town of Chemung. Since 1980 the Towns of Big Flats, the Village and Town of Horseheads, and the Town of Chemung have experienced the most vigorous levels of new business development within the County, although the City of Elmira and the Village of Elmira Heights have both undertaken significant redevelopment efforts and continue to serve as the host communities for many of Chemung County's largest employers.

Chemung County's economic base is relatively diversified. Service sector businesses continue to contribute the largest share of jobs within the County, followed by retail trade, financial, insurance and real estate, construction, manufacturers, governmental agencies, and wholesale trade businesses. In 2014, the County's largest individual employers were Arnot Health, which operates two hospitals and numerous doctor's offices through the County (2,300 employees) CAF USA (800 employees) the Hilliard Corporation (625 employees) and Hardinge Inc. (590 employees). The County's labor force totaled 38,400 in 2014. The unemployment rate has been steadily declining from a high in January 2013 of 9.9% throughout 2013 and 2014 to a rate of 6.5% in February of 2015. Private sector jobs have decreased from a high of 39,100 in 2008 to approximately 35,500 in February of 2015 due to the loss of over 2,000 jobs due to the closing of Sikorsky and several smaller companies and the slowdown of the natural gas drilling in Pennsylvania.

A total of 372 active farms existed in the County in 2012. These farms occupied approximately 58,114 acres of the County's total land area, and the average farm size was 156 acres. The County is experiencing a progressive displacement of agricultural land, particularly in the County's valley areas along the I-86 highway corridor, as a result of residential and commercial development.

1.4.1 Spring and Summer Residential and Agricultural Wastes

Table 1-3 lists seasonal residential and agricultural variations in waste, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals.

Table 1- 3 – Impacts of Residential and Agricultural Wastes Within the Planning Unit[a]

Source of Wastes	Unique Circumstance or Situation	Quantity/Quality Impacts	Impacts On LSWMP
Spring Residential Cleanup	Spring Cleanup	Seasonal influx of brush, downed trees, lawn debris, and scrap metal	Possible composting of organics; will need more data on types of material, and amounts to be composted.
Summer Growing Season	Seasonal	Yard and garden wastes. Agricultural organics and agricultural plastics wastes and cleanups, which have cleanliness and bulky issues for recycling	Possible composting of organics; will need more data on types of material, and amounts to be composted.

[a]Information and data in table to be revised throughout the Planning Period as more details become available.

The possibility of recycling organics, such as by composting or anaerobic digestion, will be discussed in the Solid Waste Management Program Strategies in Chapter 6, and tasks will be included in the Implementation Schedule as appropriate.

1.4.2 Schools

Chemung County is served by a large number of private institutions and community service facilities. The County's educational system consists of public, private, and parochial school systems. The County is also served by the GST Board of Cooperative Educational Services (GST BOCES), which includes the education districts in Schuyler, Chemung, Steuben, Allegany, and Tioga Counties. Elmira College, a private four-year institution, is located within the City of Elmira.

Table 1-4 lists the schools in the planning unit, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals.

Table 1- 4 – Impacts of Schools Within the Planning Unit[a]

Source of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Elmira College	Summer cleanout/ construction. Seasonal food wastes from cafeterias. Wastes from events held at the schools. Private hauling of school wastes and recyclables.	Dorm content, equipment left behind, C&D debris, need recycling plan implemented. Influx of food wastes. Paper, books and electronics recycling.	Organics composting programs underway. Lack of data available. Further evaluation needed.
Corning Community College (Elmira campus)	Seasonal food wastes from cafeterias. Wastes from events held at the schools. Private hauling of school wastes and recyclables.	Locker content, equipment left behind, C&D debris, need recycling plan implemented. Influx of food wastes. Paper, books and electronics recycling.	Lack of data available. Further evaluation needed.
Arnot Ogden School of Nursing	Same as above	Same as above	Same as above
Elmira Business Institute (Elmira campus)	Same as above	Same as above	Same as above
Schuyler-Chemung-Tioga BOCES - Bush Campus	Same as above	Same as above	Same as above
Horseheads Central School District (CSD)	Summer cleanout/ construction. Seasonal food wastes from cafeterias. Private hauling of school wastes and recyclables. The High School hosts Project Graduation E-Cycle Event and Recycling Night at Center Street School. Recycling club.	Locker content left behind, C&D debris, need recycling plan implemented. Influx of food wastes. Paper, books and electronics recycling.	Lack of data available. Further evaluation needed.
Elmira City School District	Summer cleanout/ construction. Seasonal food wastes from cafeterias. Private hauling of school wastes and recyclables.	Locker content left behind, C&D debris, need recycling plan implemented. Influx of food wastes. Paper, books and electronics recycling.	Lack of data available. Further evaluation needed.
Elmira Heights CSD	Same as above	Same as above	Same as above
Chemung Valley Montessori School	Same as above	Same as above	Same as above

Source of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Elmira Christian Academy	Same as above	Same as above	Same as above
Holy Family Middle School	Same as above	Same as above	Same as above
Saint Mary Out Mother School	Same as above	Same as above	Same as above
Notre Dame High School	Same as above	Same as above	Same as above
Twin Tiers Christian Academy	Same as above	Same as above	Same as above

[a]Information and data in table to be revised throughout the Planning Period as more details become available.

All the schools within the planning unit generate various amounts and types of waste and recyclable materials, but specific details are unknown. Typically these schools contract with private haulers to manage the wastes and recyclables. Given that private haulers manage these materials, the types and quantities are not reported individually. Steps to improve the reporting of data to the planning unit will be discussed in the Solid Waste Management Program Strategies in Chapter 6. Tasks will be included in the Implementation Schedule to evaluate and implement new or improved recycling programs, including organics recovery, and to collect data.

1.4.3 Libraries

Table 1-5 lists the libraries in the planning unit, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals.

Table 1- 5 – Impacts of Libraries Within the Planning Unit[a]

Source of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Steele Memorial Library	Periodic cleanouts. Private hauling of all library wastes.	Large amounts of books and magazines. Data unavailable.	Opportunity for libraries to coordinate a recycling management program among libraries. Further evaluation needed.
Horseheads Free Library	Same as above.	Same as above.	Same as above.
Big Flats Library	Same as above.	Same as above.	Same as above.
West Elmira Library	Same as above.	Same as above.	Same as above.
Van Etten Library			
Chemung County Bookmobile	Same as above.	Same as above.	Same as above.

[a]Information and data in table to be revised throughout the Planning Period as more details become available.

It is not known what these libraries are now doing with their wastes that they are generating. Possible recycling programs and data collection will be discussed in the Solid Waste Management Program Strategies in Chapter 6. This could include recycling programs for cardboard, out-dated books and periodicals, and for materials generated from any events held at the library facilities. Tasks will be included in the Implementation Schedule to evaluate and implement new or improved recycling programs, and to collect data, as appropriate.

1.4.4 Jails, Institutions, Nursing Homes

The Arnot Ogden Medical Center and St. Joseph's Hospital, both of which are also located in Elmira, each serve the residents of Chemung County and surrounding counties. Table 1-6 lists the jails, institutions and nursing homes in the planning unit, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals.

Table 1- 6 – Impacts of Jails, Institutions, Nursing Homes Within the County[a]

Source of Wastes	Facility Type/Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Chemung County Jail	Needs further evaluation.	Needs further evaluation.	Needs further evaluation related to existing disposal and recycling activities. Possible compost of food wastes.
Elmira Correctional Facility	Maintains a regional recycling center and food waste composting center.	Same as above.	With the presence of a recycling center and food composting center, information should be gathered for use in this LSWMP.
Southport Correctional Facility	Unknown. Needs further evaluation.	Same as above.	Needs further evaluation related to existing disposal and recycling activities. Possible compost of food wastes.
St. Joseph's Hospital	Medical facility	Unknown regular waste. Potential for high quantity of medical waste.	Needs further evaluation related to existing disposal and recycling activities. Possible compost of food wastes.
Arnot Ogden Medical Center	Same as above.	Same as above.	Same as above.
Bethany Village	Periodic cleanouts. Food wastes. Medical waste. No data available.	Unknown regular waste. Potential for high quantity of medical waste.	Needs further evaluation related to existing disposal and recycling activities. Possible compost of food wastes.

Source of Wastes	Facility Type/Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Appleridge Senior Living	Same as above.	Same as above.	Same as above.
Cogswell's Rest Haven	Same as above.	Same as above.	Same as above.
The Barton Home	Same as above.	Same as above.	Same as above.
Woodbrook	Same as above.	Same as above.	Same as above.
Elcor Nursing and Rehabilitation Center	Same as above.	Same as above.	Same as above.
Chemung County Nursing Facility	Same as above.	Same as above.	Same as above.

[a]Information and data in table to be revised throughout the Planning Period as more details become available.

It is not known what these institutions are doing with their wastes currently. Data needs to be collected as to what types of waste/recyclable materials they generate and where they are disposing/recycling of said materials. It also needs to be determined if they are able to compost any of their wastes such as food wastes. Possible recycling programs and data collection will be discussed further in Chapter 6.

1.4.5 Special Events within the Planning Unit

Table 1-7 lists the special events in the planning unit, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals.

Table 1- 7 – Impacts of Special Events Within the Planning Unit[a11]

Sources of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Chemung County Fair	Many vendors with packaging/food waste and recycling of drink bottles. Attendees that may or may not care about recycling or waste diversion.	Unknown what is done with the wastes generated at these events and what is recycled or total amounts generated.	There are many waste/recyclable materials that could be captured from these events. Possibility of composting organics and recycling of packaging. Data needed. Opportunity for education outreach to the community related to recycling and waste diversion.
Chemung County Fairgrounds events	On an annual basis, the fairgrounds are host to numerous animal shows, concerts, festivals, circuses, exhibits, and farmer's co-op[12]. No consistent diversion programs are in place.	Same as above.	Same as above.
Wisner Market	Vendors with packaging/food waste and recycling of drink bottles. Attendees that may or may not care about recycling or waste diversion.	Same as above.	Same as above.
Friday's Farmer's Market	Same as above.	Same as above.	Same as above.
Big Flats Community Days	Same as above.	Same as above.	Same as above.
Tag's Outdoor Summer Concert Series and Festivals (BBQ Festival and Margaritas in Paradise)	Same as above.	Same as above.	Same as above.
St. Mary's Festival	Same as above.	Same as above.	Same as above.
Elmira Street Painting Festival	Same as above.	Same as above.	Same as above.

[11] http://www.experiencecortland.com/

[12] Strong Kids Safe Kids (family event in August); horse shows; Pride and Rally (two day camping event including fireworks); Fall Festival (two day event in October); Hamfest/Computer Fest (in September); Boy Scouts Jamboree.

Sources of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Horseheads Holly Days	Same as above.	Same as above.	Same as above.
Hibernians Elmira Irish Festival	Same as above.	Same as above.	Same as above.
St. Nicholas Church Ukrainian Festival	Same as above.	Same as above.	Same as above.
Blessed Sacrament Parish Festival	Same as above.	Same as above.	Same as above.
Elmira College Octagon Fair	Same as above.	Same as above.	Same as above.
iMatter Festival	Same as above.	Same as above.	Same as above.
River Fest	Same as above.	Same as above.	Same as above.
Old Tyme Summer Festival at Brand Park	Same as above.	Same as above.	Same as above.
Environmental Field Days at Park Station	Same as above.	Same as above.	Same as above.
School Fairs, including Black Top Carnival at Hendy Avenue School, Southside Craft Fair, etc.	Same as above.	Same as above.	Same as above.
Race for the Cure	Same as above.	Same as above.	Same as above.
July 4th Festivities at Eldridge Park	Same as above.	Same as above.	Same as above.
Chemung County Soil and Water Conservation District Tire Collection Event	Event held in May for tire recycling.	Annually the event collects approximately 1,500 tires. To date, the event has collected over 30,000 tires.	Other recycling events could be co-located during these events. Opportunity for education outreach to the community related to recycling and waste diversion.
Town of Horseheads Electronic Collection Days	E-waste collection events held.	Electronics that do not belong in the waste stream are diverted for recycling. Recycling data is unknown at this time.	Same as above.
Chemung River Friends River Clean-Up Events	Dedicated volunteers that care about the environment conduct river clean up events periodically.	Unknown what is done with the wastes generated at these events and what is recycled or total amounts generated. Potential for recycling of some materials.	Same as above.

Sources of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Environmental Management Council E-cycling Event	E-waste collection events held at fairgrounds.	Electronics that do not belong in the waste stream are diverted for recycling. Recycling data is unknown at this time.	Same as above.

[a]Information and data in table to be revised throughout the Planning Period as more details become available.

The potential of capturing recycling and wastes from special events could be increased dramatically. It is unknown at this time if any wastes are being captured or recycled at these events. It needs to be investigated as to what events are held, when and where they are held, what types of waste/recyclable materials are being generated, and how they are currently being managed. Possible recycling programs and data collection will be discussed in the Solid Waste Management Program Strategies in Chapter 6. Tasks will be included in the Implementation Schedule to evaluate and implement new or improved recycling programs, including packaging and organics recovery, and to collect data.

Membership Changes

The membership of the Planning Unit has not changed since its inception. The same towns, villages, and one (1) city still remain a part of this Planning Unit. It is not anticipated that there will be any changes of municipalities within the Planning Unit.

There have been a few changes in schools, and colleges being introduced to the planning unit. There has also been a reduction in the number of operating farms within the unit since the last LSWMP. There has been some commercial growth, as well as some commercial businesses have left the planning unit, resulting in a difference in the types of waste received. The impacts of schools and colleges and commercial establishments and related LSWMP tasks are addressed in Section 1.4.

The retail businesses have increased within the planning unit. There are now many larger retail businesses located in the Chemung area, where there were only small retail shops in the original LSWMP. This increases the amount of packaging wastes generated as well as organics, or food waste in the case of more grocery stores. It is presently assumed that the large majority of these retail businesses recycle their own cardboard which is received in shipment of their products. This will need to be evaluated further to obtain current data. The impacts of retail businesses and related LSWMP tasks are addressed in Section 1.4.

Table 1-8 summarizes the changes to the planning unit since the last LSWMP and the impacts to be considered for this plan.

Table 1- 8 – Impacts of Planning Unit Changes on LSWMP

Planning Unit Changes	Quantitative and Qualitative Impacts	Impacts on LSWMP
Large Retail businesses	More packaging materials	More recycling data needs to be collected
Increase in drilling activities in Pennsylvania	More drill cuttings waste	Increased drill cutting waste management
Fewer Manufacturing Businesses	Less wastes from manufacturing	Less waste generated, less materials available for recycling

There have been quite a few changes in the manufacturing businesses in the Planning Unit since the original Plan. Several businesses have left the area, and some have started up or expanded. They are very diverse in the type of manufacturing that is occurring. There is a data collection need to determine the types and amounts of waste/recyclable materials generated and how such materials are currently managed, as a precursor to developing potentially appropriate waste diversion and recycling initiatives during the LSWMP planning period at these businesses.

Chapter 2 - Solid Waste and Recyclables Quantities and Types

This chapter provides information on the waste streams generated in Chemung County.

2.1 Waste Types

Chemung County's solid waste stream has five (5) primary components: municipal solid waste (MSW), non-hazardous industrial waste, construction and demolition debris, municipal sewage treatment plant sludge/biosolids, and processed scrap metal (e.g., scrap vehicles) waste.

For the purposes of this LSWMP, **MSW** consists of waste generated in homes, businesses, institutions, and the commercial portion of waste discarded by industries. The residential component includes, but is not limited to, newspapers and magazines, glass, metal, plastic containers, food waste, household goods including bulky items like furniture and appliances, textiles, and yard trimmings. The commercial waste stream tends to contain higher percentages of office paper, corrugated cardboard, and scrap metals. Commercial waste is the non-hazardous waste generated by businesses such as restaurants, retail stores, schools and hospitals, professional offices, and manufacturing facilities.

As a regulatory requirement, each solid waste management facility is required to submit annual reports to the NYSDEC. These annual reports provide information with regard to the quantities of materials managed and often identify the geographic locations where the waste materials were generated. The data from the NYSDEC annual reports is readily available and generally reliable. It can also be assumed that the materials collected and processed at the Chemung County Material Recovery Facility and other similar recycling facilities in the County are being separated from the household, business, institutional and commercial wastes classified as MSW, and are considered to be another component of that waste stream. Due to the fact that these types of recyclables handling facilities must also compile annual reports to the NYSDEC, this data is also relatively easy to gather. Yard waste is a component of the waste stream that is difficult to quantify. Implementation of a plan to collect data and estimate MSW by material type, including estimating residential yard waste generation and recovery is further discussed in Chapter 6 (Program Strategy #16).

Non-hazardous industrial waste is typically generated by manufacturing facilities as a result of an industrial process and is made up of materials such as sludge, ash, drill cuttings and dust. According to annual reports submitted to NYSDEC, some portion of these materials are disposed of in local landfills; however, the homogeneous nature and relatively large quantity of these wastes typically available can also make them useful as feedstocks for other processes or result in unique management methods. Therefore,

only partial data for the generation of these materials within the county is currently available. Implementation of a plan to collect data and estimate MSW by material type, including estimating industrial waste generation and recovery, considering these circumstances is further discussed in Chapter 6 (Program Strategy #16).

Construction and demolition (C&D) debris is generated by the residential, commercial, industrial, and institutional sectors and typically consists of wood, masonry, soil, land clearing debris, plumbing fixtures and other construction related items. For this specific analysis, asbestos debris and petroleum contaminated soil that is not considered alternative daily cover are also included in the C&D debris category. Many of the upstate New York landfills report C&D debris as a separate disposal stream, and therefore, the quantity disposed of from Chemung County residents can be identified from those landfill annual reports. However, many of these materials can be recycled and reused (e.g., clean fill material, mulch, or recycled aggregate). Data from these types of operations and uses has been difficult to obtain. Implementation of a plan to collect data and estimate C&D debris generation and recovery, considering these circumstances is further discussed in Chapter 6 (Program Strategy #16).

Municipal treatment plants generate sludge/biosolids that require special handling and management. This material is landfilled and the data is readily available from the annual reports to NYSDEC.

Processed scrap metals are typically generated by commercial or industrial sectors, but in potentially large quantities which makes it worth monitoring. Data from these types of operations and uses is difficult to obtain. Implementation of a plan to collect data and estimate scrap metals generation in the County and recovery, considering these circumstances is further discussed in Chapter 6 (Program Strategy #16).

2.2 Availability of Generation and Recovery Estimates

2.2.1 Data Sources and Methodology

As discussed above, much of the following waste generation estimates were derived from available reports provided to the NYSDEC by permitted landfills, sewage treatment plants, and recycling centers. Limitations associated with the data are as follows and will be considered when evaluating and implementing new or improved data collection efforts as described in Program Strategy #14.

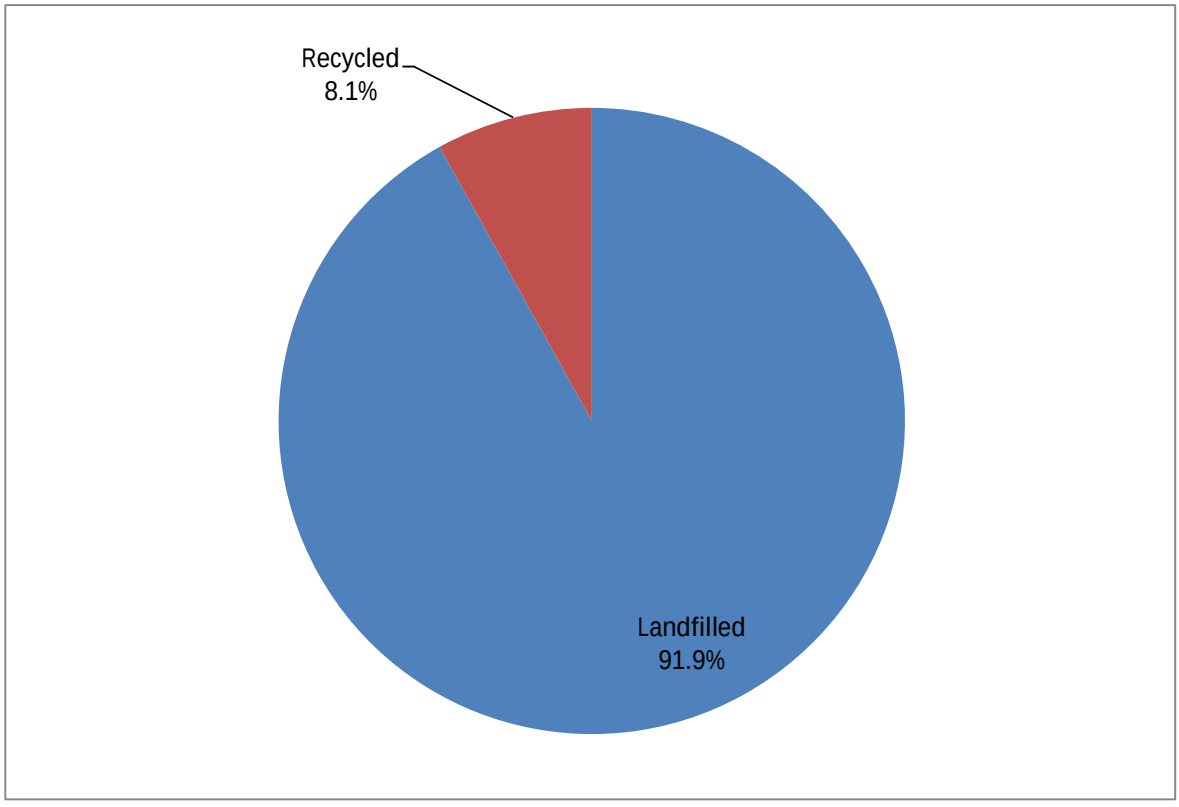
- **Incomplete data**: Data on the public sector solid waste management is often incomplete.

- **Inconsistent data:** Where data exists, different methods have been used from year to year and facility to facility to collect and categorize it.
- **Unavailable data:** Data on privately managed waste is generally unavailable.

2.2.2 Estimation of Total Waste Generation in Chemung County

Based on annual reports submitted to the NYSDEC for 2010, Chemung County residents and businesses generated approximately 111,193 tons of waste (including potentially recyclable materials) based on available data. Figure 2-1 shows the overall method of management for the waste. The fraction for each waste management sector was determined by analyzing annual tonnage reports for those facilities that reported accepting waste from Chemung County. Based on the information available to interpret, the majority of the waste is landfilled (102,215 tons or 91.9 percent) while the remainder is recycled (8,978 tons or 8.1 percent).

Figure 2- 1 - Estimated Waste Management Methods in Chemung County in 2010



Source: NYSDEC, Facility Annual Reports, 2010; and NYSDEC, Biosolids Management in New York State, 2011 and Self Reporting

Chemung County has three (3) wastewater treatment facilities (WWTFs). The Chemung County Sewer District is comprised of two (2) WWTFs located on Milton Street and Lake Street in the City of Elmira. It is currently the practice of the District to only accept wastewaters generated within the County. The sludge, grit and screenings that are created during the treatment process are disposed of at the Chemung County Landfill. Table 2-1 shows the method of sludge management utilized.

Table 2- 1 - Municipal Sewage Sludge Generation and Management Summary

Treatment Plant	Treatment Method	Dewatering Device	Tons/Year	Use/Disposal Method	Location
Baker Road Wastewater Treatment Facility	Aerobic Digestion	None	2	Landfill	Chemung County Landfill via Chemung Co. Elmira Sewer District
Milton Street Wastewater Treatment Facility (Chemung Co. Elmira Sewer District)	Anaerobic Digestion	Belt Filter Press	760	Landfill	Chemung County Landfill
Lake Road Wastewater Treatment Facility (Chemung Co. Sewer District No. 1)	Anaerobic Digestion	Belt Filter Press	204	Landfill	Chemung County Landfill
Total			966		
Total Sewage Sludge Composted On-site			**0**		
Total Sewage Sludge Landfilled			**966**		
Total Municipal Sewage Sludge Generated			**966**		

Source: NYSDEC, Biosolids Management in New York State, 2011

Table 2-2 provides further detail on the types of waste managed through each method; however, a complete breakdown of waste generated as a whole for Chemung County is not available due to the lack of comprehensive data available at this time. Tasks are included in the Implementation Schedule to investigate the implementation of a survey and reporting program as well as any other programs that might be useful and necessary to collect generation and recovery data in general accordance with this format. Table 2-2 provides a waste generation baseline, which will be expanded as data becomes more readily available and can be incorporated into future waste generation analysis.

Table 2- 2 - Estimation of Total 2010 Waste Tonnage by Facility

	Amount (Tons)	Percentage	% of Total Generation
Landfilled [1,4]			
MSW	68,731	67.2	61.8
Construction and Demolition Debris (includes C&D Debris, Petroleum Contaminated Soil and Asbestos)	18,432	18.0	16.6
Sewage Sludge[2]	966	0.9	0.9
Industrial (includes drill cuttings)	9,290	9.1	8.4
Alternative Daily Cover/Beneficial Use Determination Material	4,796	4.7	4.3
Total	**102,215**	**100.0**	**91.9**
Diverted			
Composted Sewage Sludge	0	0.0	0.0
Composted Yard Waste[3]	0	0.0	0.0
Recovered/Composted Food Scraps	0	0.0	0.0
Recycled[4]	8,978	100.0	8.1
Processed Construction & Demolition Material	0	0.0	0.0
Total	**8,978**	**100.0**	**8.1**
Total Waste Generation	**111,193**		

1. The NYSDEC 2010 Facility Annual Reports provided the tonnages landfilled at the various landfills including: Chemung County Landfill, Chemung County C&D Landfill, Seneca Meadows Landfill, Ontario County Landfill, Hyland Landfill, Hakes Landfill, High Acres Landfill, and Chaffee Landfill.
2. The NYSDEC report, *Biosolids Management in New York State, 2011* provided the most recent data for STPs. Refer to Table 2-1.
3. Quantities were not reported at the compost facilities in the Town of Big Flats, Town of Elmira or City of Elmira.
4. The NYSDEC 2010 Recyclables Handling and Recovery Facility Reports provided the tonnages recycled at the various recovery facilities. The following recovery facilities received materials from Chemung County: Chemung County MRF and Casella Recycling.
5. Shaded categories are considered to be part of the MSW category, and will be utilized in the MSW composition analysis and projections (77,709 tons) in Table 2-3.

2.3 Estimation of Potential MSW Recovery

As previously discussed, an incomplete set of disposal and recovery data is available for the County to compile and review; therefore, with the assistance of the NYSDEC's waste composition and recovery projection tool, the following section provides Chemung County with an estimated **MSW** waste composition for future planning purposes. The complete tables are provided in Appendix A. **MSW** composition includes residential, commercial and institutional waste generators; consequently, for the purposes of this analysis, we have excluded the following from the **MSW** composition estimates: separately managed C&D debris, several organics streams (biosolids, septage, agricultural materials, etc.), industrial waste, medical and biohazardous materials, and scrap metal managed outside of the MSW management structures. Additionally, the quantities of containers (i.e., aluminum, glass and PET) collected as part of the Recoverable Container Act (RCA) are typically not reported to databases that are available to individual counties. With the NYSDEC's assistance, the table below provides some assumptions as to the quantity of containers recovered as part of RCA in 2010.[13]

The following table provides an estimate based on the total tons of **MSW** generated in Table 2-2 within the County that could be recovered or diverted from a waste disposal location if the appropriate programs were in place.

[13] According to 2010 RCA data from the NYSDEC, 59% of deposit containers are recovered. Of the containers, 80% of Aluminum containers are deposits, 50% of glass containers are deposits, and 45% of PET containers are deposits.

Table 2- 3 - Estimated MSW Recoverable Materials in Chemung County[14]

Material	Estimated MSW Tons Generated (2010)	Estimated % of Total Tons Generated (2010)	Estimate of Actual MSW Tons Diverted (2010)	% of Each Material Diverted (2010)
Newspaper	**2,857**	**3.68%**	**2,032**	**71.12%**
Corrugated Cardboard	**7,623**	**9.81%**	**2,558**	**33.56%**
Other Recyclable Paper				
Paperboard	**1,774**	**2.28%**	**657**	**37.04%**
Office Paper	**1,766**	**2.27%**	**631**	**35.74%**
Junk Mail	**1,601**	**2.06%**	**493**	**30.78%**
Other Commercial Printing	**1,549**	**1.99%**	**458**	**29.59%**
Magazines	**736**	**0.95%**	**303**	**41.15%**
Books	**320**	**0.41%**	**9**	**2.70%**
Bags	**286**	**0.37%**	**9**	**3.02%**
Phone Books	**233**	**0.30%**	**43**	**18.55%**
Poly-Coated	**167**	**0.21%**	**35**	**20.75%**
Other Recyclable Paper (Total)	**8,433**	**10.85%**	**2,638**	**31.28%**
Other Compostable Paper	**5,081**	**6.54%**	**0**	**0.00%**
Total Paper	**23,994**	**30.88%**	**7,228**	**30.13%**
Ferrous/Aluminum Containers				
Ferrous Containers	**904**	**1.16%**	**208**	**22.95%**
Aluminum Containers	**391**	**0.50%**	**26**	**6.64%**
Ferrous/Aluminum Containers (Total)	**1,295**	**1.67%**	**233**	**18.03%**
Other Ferrous Metals	**4,145**	**5.33%**	**86**	**2.09%**
Other Non-Ferrous Metals				
Other aluminum	**190**	**0.24%**	**9**	**4.56%**
Automotive batteries	**468**	**0.60%**	**0**	**0.00%**
Other non-aluminum	**287**	**0.37%**	**0**	**0.00%**
Other Non-Ferrous Metals (Total)	**945**	**1.22%**	**9**	**0.92%**
Total Metals	**6,385**	**8.22%**	**329**	**5.15%**

[14] MSW as quantified in this table excludes C&D debris, non-hazardous industrial wastes and sewage sludges.

Material	Estimated MSW Tons Generated (2010)	Estimated % of Total Tons Generated (2010)	Estimate of Actual MSW Tons Diverted (2010)	% of Each Material Diverted (2010)
PET Containers	**696**	**0.90%**	**251**	**36.02%**
HDPE Containers	**651**	**0.84%**	**242**	**37.20%**
Other Plastic (3-7) Containers	**144**	**0.19%**	**43**	**30.00%**
Film Plastic	**4,419**	**5.69%**	**0**	**0.00%**
Other Plastic				
Durables	**2,415**	**3.11%**	**0**	**0.00%**
Non-Durables	**1,312**	**1.69%**	**0**	**0.00%**
Packaging	**985**	**1.27%**	**0**	**0.00%**
Other Plastic (Total)	**4,712**	**6.06%**	**0**	**0.00%**
Total Plastics	**10,623**	**13.67%**	**536**	**5.05%**
Glass Containers	**3,028**	**3.90%**	**865**	**28.56%**
Other Glass	**298**	**0.38%**	**0**	**0.00%**
Total Glass	**3,326**	**4.28%**	**865**	**26.00%**
Food Scraps	**10,634**	**13.68%**	**0**	**0.00%**
Yard Trimmings	**5,852**	**7.53%**	**0**	**0.00%**
Total Organics	**16,485**	**21.21%**	**0**	**0.00%**
Clothing Footwear, Towels, Sheets	**3,018**	**3.88%**	**0**	**0.00%**
Carpet	**1,161**	**1.49%**	**0**	**0.00%**
Total Textiles	**4,178**	**5.38%**	**0**	**0.00%**
Total Wood	**3,403**	**4.38%**	**0**	**0.00%**
C&D Materials	**3,783**	**4.87%**	**0**	**0.00%**
Other Durables	**1,278**	**1.65%**	**0**	**0.00%**
Diapers	**1,282**	**1.65%**	**0**	**0.00%**
Electronics	**1,197**	**1.54%**	**20**	**1.67%**
Tires	**1,279**	**1.65%**	**0**	**0.00%**
HHW	**261**	**0.34%**	**0**	**0.00%**
Fines	**235**	**0.30%**	**0**	**0.00%**
Total Miscellaneous	**9,316**	**11.99%**	**20**	**0.21%**
Total	**77,709**	**100.00%**	**8,978**	**11.5%**

Source: NYSDEC MSW Combined Composition Analysis and Projections; 2010 NYSDEC Facility Annual Reports.

Based on the quantities of potential divertible materials that were reported to the NYSDEC or estimated, Chemung County diverted approximately 8,978 tons of material (11.5 percent) from the MSW disposal stream in 2010. The table above indicates that 77,709[15] tons of **MSW** materials are generated and available for diversion from residential, commercial and institutional generators. Not all the categories are populated for the 2010 actual recovery quantities due to the fact that not all categories are accounted for individually. Several materials identified above are collected and recovered at the recycling centers or other similar facilities in Chemung County; however, there are no mechanisms for gathering data for the individual materials at this time. Therefore, a program strategy (Program Strategy #16) has been added to evaluate and implement data collection efforts. Chapters 3 and 6 describe the existing systems for recovering these materials as well as possible future program strategies during this planning period to increase the County's diversion rate.

2.4 Estimation of Potential C&D Debris Recovery

C&D debris can be assessed separately from MSW or industrial wastes. By utilizing the NYSDEC's C&D debris composition and recovery projection tool, the following section provides Chemung County with an estimated C&D debris composition for future planning purposes. The complete tables are included in Appendix A. According to NYSDEC, their analysis and the waste composition and recovery projection tool considers the variations in the C&D debris waste stream resulting from the construction, remodeling, repair and demolition of utilities, structures and roads and includes land clearing debris from both the building and infrastructure generating sectors. Variations within the building sector from new construction, renovation and demolition activities are considered from both the residential and non-residential generating sectors.

Based on the data reported in the NYSDEC annual reports, the following table provides an overview of the tons of C&D debris that could be recovered or diverted from a waste disposal location if the appropriate programs were in place.

[15] Excludes processed C&D, asbestos, industrial waste, sewage sludge, contaminated soil, beneficial use determination materials previously reported in Table 2-2.

Table 2- 4 - Estimated C&D Debris Recoverable in Chemung County

Material	Estimated Components of C&D Debris Tons Generated in 2010 per NYSDEC Model	% of Total C&D Debris Generated (2010)	Tons of C&D Debris Diverted per 2010 Data Obtained	
			Tons Diverted	% Diverted
Concrete/Asphalt/Rock/Brick	5,626	35.39%	0	0%
Wood	2,352	14.80%	0	0%
Roofing	783	4.93%	0	0%
Drywall	403	2.54%	0	0%
Soil/Gravel	4,326	27.22%	0	0%
Metal	940	5.91%	0	0%
Plastic	63	0.40%	0	0%
Corrugated/Paper	318	2.00%	0	0%
Other	1,084	6.82%	0	0%
Total	**15,897**	**100.00%**	**0**	**0%**

Source: 2013 NYSDEC Facility Annual Reports and Appendix I.

No data was reported to the NYSDEC for diverted C&D materials in 2010, but approximately 4,975 tons of C&D debris was disposed in the County's C&D landfill in 2010. The table above indicates that 15,897 tons of C&D materials could potentially be available for diversion from residential and non-residential construction, renovation or demolition projects. A task has been added to the Implementation Schedule to evaluate and implement data collection efforts. Chapters 3 and 6 describe the existing systems for recovering these materials as well as possible future programs during this planning period to increase the County's diversion rate.

Chapter 3 - Existing Program Description

3.1 Current Solid Waste Management System

Chemung County completed a Comprehensive Recycling Analysis in 1989 and original Integrated Solid Waste Management Plan in 1991. The plan was subsequently updated in August 2006 and April 2009 to more accurately reflect the operating conditions within the County. Chemung County serves as the Planning Unit for all municipalities within the County.

The original LSWMP called for the continued operation of the Chemung County Solid Waste Management District (CCSWMD) through the regional MSW and C&D debris landfills, Waste Milling Station, and Waste and Recyclables Transfer Stations. The CCSWMD was established for the purpose of managing the solid waste generated within Chemung County in an environmentally and economically sound manner. The County recognized that there would be a benefit in privatizing their resource management infrastructure. The County proceeded down the path of developing an RFP and went through a formal bidding process. In September 2005, Chemung County entered into an Operation, Management & Lease Agreement (OML) with New England Waste Services of N.Y., Inc. (NEWSNY) a subsidiary of Casella Waste Systems. Through this agreement, NEWSNY became responsible for the operations and management of all County-owned solid waste and recyclables infrastructure through the year 2030. In an effort to maintain these services while remaining economically stable, the County chose to enter into the OML and to dissolve the CCSWMD. This change of management did not alter the County's objectives to provide resource management for its residential, commercial, and industrial users.

Following the decision to contract out operations and management of the landfill and transfer station through a lease agreement, Chemung County took the position of relying on the private sector to manage the County's solid waste and recyclables. The County continues to be removed from the primary role as a solid waste manager. The OML agreement has provided the following financial benefits to Chemung County and its residents since the OML was entered into.

- $11 million in OML agreement lease payments
- $9.6 million in First Amendment Payments
- $0.15 million in recycling host fees
- $0.1 million in property taxes (School, Town, County)
- $0.68 million County Owned Nelson Property
- $0.75 million County Reimbursements
- $0.42 million Career Development and Scholarship
- $0.39 million Assumed Employee

- $0.45 million Small Project fund
- $0.41 million Hoffman House / Friends of the Chemung River
- $0.45 million for Household Hazardous Waste Days
- $0.05 million assistance with solid waste management planning efforts

The revenue received by Chemung County pursuant to this OML has helped the County implement programs that they would otherwise not have been able to provide. It is expected that these financial benefits will continue to assist the County in implementing the program strategies that promote waste diversion and recovery as described in Chapter 6.

The County owns one (1) central landfill comprised of an operational MSW and C&D debris landfill in the Town of Chemung and a transfer station/materials recovery facility (MRF) in the City of Elmira, which is currently operated as a consolidation center for waste and recyclable materials that are trucked off-site for disposal at the landfill and processing at a MRF, respectively. Both are operated by NEWSNY. Additionally, NEWSNY operates four (4) residential waste and recyclables drop-off stations in the Towns Big Flats, Lowman, Erin, and Southport. These facilities deliver their collected waste and recyclables to the County MRF or the Chemung County Landfill. Generators and haulers are not required to deliver waste or recyclables to the County facilities and businesses may self-market their recyclables. Therefore, not all waste and recyclables pass through the County facilities. It is currently estimated that slightly more than 80 percent of the MSW and nearly 70 percent of the C&D debris is managed outside of the County.

Given the rural nature of Chemung County, a limited variety of collection services are used in the County to collect and transport solid wastes to landfills and recycling centers/transfer stations. Methods include residential drop-off stations or private contracts. Most entities transport their waste and recyclables directly to the landfill or transfer station for proper management by the County's private contractor. Chemung County does not collect or transport materials from the source. In some cases, private haulers contract on an individual basis to collect and transport the waste and recyclables to a transfer station or disposal location of their choice. The City of Elmira is the only municipality within Chemung County that offers municipally run collection of garbage and recycling. All residential properties located within the City of Elmira receive garbage collection unless the property owner has opted out of the service. Households pay an annual fee per unit, which is billed and collected along with their city taxes. Households are permitted to dispose of a maximum of three (3) bags of waste per week under the condition that each bag weighs 30 pounds or less. Commercial properties are not automatically enrolled, but may opt in to the program at any time. All participants may opt-out of the program at any time. This program is also contracted out by the City of Elmira to residents living in Elmira Heights. Residents of Elmira Heights are required

to purchase garbage stickers for $2.00 per sticker, which are adhered to the garbage bags that are collected by the City of Elmira. A summary of waste disposal activities by waste type follows.

3.2 Solid Waste Management Facilities and Recovery Efforts

Program Strategy #16 is included in the Implementation schedule and involves collecting and evaluating data and information regarding capacity/expected life, service areas, operating status, and other issues to resolve or areas for improvement including data collection, education, outreach and enforcement needs, etc., for every facility and program that manages MSW, sewage sludge/biosolids, C&D debris, processed scrap metal, and/or industrial waste generated in Chemung County. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Chemung County's activities related to them, to determine what improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be. For Planning Unit owned facilities/programs, infrastructure/components, age, operating dates, size, regulatory status, partnerships/ opportunities, contracts, improvements or changes, and resources/ needs/ costs /revenue/reference to economic analyses will also be compiled.

3.2.1 Landfill Facilities

Chemung County currently owns one (1) solid waste landfill and one (1) C&D debris landfill within the County's borders. The active MSW landfill began accepting waste in 1989 (Active MSW landfill Cells I through IV) and the active C&D debris landfill began accepting waste in 1992. The County-owned landfill property is located on County Route 60 in the Town of Chemung. Other closed landfills are present on the property (Areas 2, 3, and 5). The existing annual permit limit for the active MSW landfill is 180,000 tons per year, and the remaining constructed capacity reported in the 2013 annual report was 365,046 cubic yards, with an anticipated site life of approximately 1.8 years depending on actual waste receipts. The active C&D debris landfill has an existing annual permit limit of 20,500 tons of C&D debris per year. The remaining constructed capacity as of the end of 2013 was 210,558 CY, with an anticipated site life of 10.2 years remaining, depending on actual waste receipts. All waste operations undertaken at the Chemung County Landfill are done in accordance with NYSDEC Part 360 regulations and any special conditions set forth in the Operating Permit issued by the NYSDEC. MSW, asbestos waste, C&D debris, commercial/industrial waste, and sewage treatment plant sludge are accepted at the site. There are no other active landfills within Chemung County.

Most residents and commercial/industrial entities that are either not served by or elect not to contract with a private hauler, deliver their waste to a Drop Off

Station owned by Chemung County and operated by NEWSNY. However, the following municipalities in Chemung County transport waste directly to the Chemung County Landfill:

- Town of Ashland
- Town of Baldwin
- Town of Catlin
- Town of Elmira
- Town/Village of Horseheads
- Town/Village of Van Etten
- Town of Veteran
- Village of Elmira Heights
- Village of Millport
- Village of Wellsburg

Additionally, other landfills, located outside of Chemung County, are available for the disposal of MSW. These out-of-County landfills are summarized below in Table 3-1.

Table 3- 1 – Out-of-County Solid Waste Landfills Servicing Chemung County Waste

Solid Waste Facility	Facility Address	Permitted Capacity (cubic yards)	Expected Site Life (years)	Operating Status
Hyland Landfill	6653 Herdman Road Angelica, New York	9,112,840	21.3	Private
Hakes Landfill	4376 Manning Ridge Road Campbell, New York	3,574,600	10.7	Private
Ontario County Landfill	3555 Post Farm Road Seneca, New York	3,373,843	3.3	Municipally owned; Operated by Casella; No Flow Control; Expansion Permit application under review by NYSDEC.
Seneca Meadows Landfill	1786 Salcman Road Waterloo, New York	30,893,000	10	Private; Largest landfill in NYS
Bath Landfill	5632 Turnpike Road Bath, New York	2,144,000	13	Municipally owned and operated
High Acres Landfill & Recycling Center	425 Perinton Parkway Fairport, New York	52,500,000	40	Private
Mill Seat Landfill	303 Brew Road, Bergen, New York	4,700,000	6.8	Municipally owned; Operated by Waste Management of New York, LLC.

Source: NYSDEC Annual Facility Reports (2013)

Each of these out-of-county landfills accepted waste that was generated in Chemung County in 2013. Other landfills also exist throughout New York State; however, they may have disposal restrictions or are located outside a reasonable service area to accept waste generated in Chemung County.

3.2.2 Transfer Stations or Drop Off Stations

As previously mentioned, most residents and commercial/industrial entities that are either not served by or elect not to contract with a private hauler, deliver their waste and recyclables to a Drop Off Station owned by Chemung County and operated by NEWSNY.

The Lake Street Facility, owned by Chemung County and operated by NEWSNY, is located on Lake Street in the City of Elmira. Currently the facility operation allows for a multitude of resource management activities. MSW and recyclables are deposited in their respective areas of the transfer building for reloading into larger trailers for transport. From this facility, MSW and C&D debris are transported to various New York landfills for final disposal. Recyclables are transported to a Zero-Sort® MRF for further processing and sales to market. Various electronics, scrap metal and tires may be accepted for a nominal fee and are segregated so that they may be transported for disposal or recycling at an appropriately permitted facility. Recyclable materials accepted for transport through the MRF currently includes; glass bottles and jars, tin and aluminum containers, plastics #1-7, mixed paper, office paper, magazines, newspaper and cardboard. The solid waste transfer station and MRF have no annual tonnage limit for acceptance of materials.

The Lake Street Residential Drop Off Station is also located on the grounds. Residents may bring their waste and recyclables to the Drop Off Station for disposal and recovery respectively. The County provides a pay-as-you-throw (PAYT) program whereby residents pay for disposal of their solid waste at a per bag rate ($4.00 per bag), while recyclables are received at no charge. For residential safety, the activities associated with the Drop Off Station are segregated from the larger transfer station/MRF operations.

In addition to the Lake Street Residential Drop Off Station, several other Drop Offs are located around the County for residential use. These stations are located in the Towns of Big Flats, Erin, Lowman and Southport. The County provides a PAYT program whereby residents pay for disposal of their solid waste at a per bag rate, while recyclables are received at no charge. A listing of the transfer station facilities in Chemung County is presented in the following Table 3-2.

Table 3- 2 - Active Transfer Stations in Chemung County

Transfer Station Name	Owner/Operator	Facility Address	Disposal Destination	Age/ Expected Life	Infrastructure Components
Big Flats Drop-off Station	Chemung County/ NEWSNY	3305 Chambers Road South Big Flats, NY 14845	Chemung County TS or MRF	Unknown	Accepts MSW and recyclables.
Erin Drop-off Station	Chemung County/ NEWSNY	1892 Swartwood Road Erin, NY 14838	Chemung County TS or MRF	Unknown	Accepts MSW and recyclables
Lowman Drop-off Station	Chemung County/ NEWSNY	1488 County Route 60 Chemung, NY 14901	Chemung County Landfill or Casella Recycling		Accepts MSW and recyclables.
Southport Drop-off Station	Chemung County/ NEWSNY	93 Institution Road Pine City, NY 14871	Chemung County TS or MRF	Unknown	Accepts MSW and recyclables.
Chemung County Transfer Station/MRF	Chemung County/ NEWSNY	1690 Lake Street Elmira, NY 14802	Chemung County Landfill or Casella Recycling	Unknown	Accepts MSW and recyclables.

Source: NYSDEC Annual Facility Reports (2013)

3.2.3 Existing Efforts to Recover Recyclables

The County's agreement with NEWSNY indicates that NEWSNY shall develop a recycling program in lieu of a royalty fee.

In January 2006, through its partnership with NEWSNY, the County was able to introduce a Zero-Sort® recycling program. The program utilizes the existing Zero-Sort® Materials Recovery Facility at the Ontario County Landfill in Stanley, New York for final processing and sale to market. The goal behind this transition was to make recycling easier for the consumer and to increase participation. The County and its partners are committed to providing the most efficient and accommodating recycling services to its residents and businesses.

Zero-Sort® recycling provides generators with the convenience of not having to sort recyclables into groups or separate containers. Less fuel and fewer routes are needed to efficiently collect the commodities, which thereby reduces the carbon footprint associated with recyclables collection. Once deposited at the Lake Street Facility, all recyclables are then moved via transfer trailers to an appropriately permitted Materials Recovery Facility (typically the Zero-Sort® facility located in Ontario County) for processing.

Items currently accepted for recycling are shown below:

- Fibers
  Magazines / Newspapers
  Corrugated Cardboard
  Mixed Paper
  Office Paper
- Mixed Plastics #1-7 (as markets allow)
- Metals
  Ferrous and bi-metal food containers
  Other ferrous
  Aluminum Cans / Foil
  Other Aluminum
  Other non-ferrous
- Glass Bottles and Jars
- Aseptic Packaging

In 1996 Chemung County passed Local Law #4 (Chemung County Solid Waste Management District Separation and Segregation of Recyclables or Reusable Material Law) which required the segregation of recyclables (for which economic markets exist) from the waste stream. The CCSWMD was tasked with enforcing the provisions of the law to further protect public health, safety and

welfare and for the enhancement of the environment. With the abolishment and termination of the CCSWMD in 2006, the County took over responsibility for this law's initiatives. As discussed in Chapter 6, Program Strategy #18 intends to review the County's current law including the list of mandatory recyclables, the enforcement provisions, the hauler licensing provisions and the full source separation requirements.

3.2.4 Residential Sector Recycling Facilities and Efforts

Table 3-2, above, provides a summary of the transfer stations that accept recyclables. As mentioned above, Chemung County contracts with a private operator (Casella Recycling) to operate a MRF on Lake Street in the City of Elmira. Materials accepted at this location are consolidated and trucked to Casella's Ontario County single stream recycling facility (zero-sort single stream program). Other known recycling facilities located within Chemung County include Shulman Company, Kaplans Scrapyard, WM Spiegel & Sons, Central Recycling Co-op, McDonald Contracting, Inter-State Battery, and Re-Act E-Cycling. Little information on services was available at the time this Plan was prepared.

Two basic systems currently exist in Chemung County for the collection of recyclables: curbside collection and residential drop off sites (i.e., transfer stations). Residents who elect not to hire a private hauler typically drop-off recyclables at a Drop Off Station operated by NEWSNY. The Drop Off Stations do not charge for the acceptance of recyclables. Recycling flyers available to residents are provided in Appendix C for further information.

Bulk Items, which includes larger items such appliances and televisions, are handled at the transfer stations. In most cases, scrap metal collection is free and collected in a separate container from other bulk items. Metal is traditionally one of the more highly valued recyclable materials.

Not all data is available for the residential recycling sector; therefore, Chapter 6 includes solid waste management program strategies to address data collection, education, outreach and enforcement needs, etc., for each facility or program that manages residential recyclables generated in Chemung County. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Chemung County's activities related to them, to determine what improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

3.2.5 Commercial Sector Recycling Facilities and Efforts

On the commercial front, shopping centers, hospitals, and medical office buildings are establishments that generate large volumes of waste and recyclable materials. These establishments may contract directly with a recycling operation to collect and manage their recyclables or they may utilize drop off stations or transfer stations.

Since there is no reporting requirement for these commercial entities, quantities and types of waste/recyclable materials disposed or recovered in Chemung County have not been made readily available to the County. Program Strategy #16 in Chapter 6 is intended to address the issue of the lack of data being reported by the various commercial entities. Additionally, Program Strategy #14 (Public Outreach and Education) will include the commercial recycling sector. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Chemung County's activities related to them, to determine what improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

3.2.6 Agricultural Sector Recycling Efforts

Chemung County is proud to have an agricultural plastics recycling program. Although in its infancy, the County has begun a pilot program that allows a small number of farmers to bale their agricultural plastics in lieu of other disposal options. This program is currently constrained by the availability of markets interested in the baled commodity. In 2013 and 2014, 40 bales and 80 bales of agricultural plastics were sent out for recycling, respectively. The Soil & Water Conservation District will continue to work on establishing markets and looking for partnership opportunities with other planning units, so that the program may provide a regional benefit and commodity quantities that are desirable to the recycling markets. In addition, pesticide containers are collected from area farmers through the USAg Recycling program twice a year. This is coordinated with Schuyler County. Program Strategy #16 in Chapter 6 is intended to identify the quantity and type of this waste stream to determine what improvements, partnerships, or other alternatives should be evaluated to manage this sector. Future planning periods will address the issue of implementing an agricultural sector recycling effort.

3.2.7 C&D Debris Sector Processing Facilities and Efforts

Collection of C&D debris for processing is not provided by the County and collection must be contracted for independently with private haulers or contractors. Program Strategy #2 in Chapter 6 looks at evaluating the need of these facilities and programs in Chemung County to determine what partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

3.2.8 Institutional Recycling Efforts

Large educational institutions, such as local school districts, Elmira College, prisons, nursing homes, hospitals, and senior living complexes, tend to produce large quantities of paper wastes and food wastes. Sections 1.4.2 and 1.4.4 in Chapter 1 provided an overview of several of these institutions. These institutions manage their own waste and recyclables. Chemung County does not monitor and enforce recycling efforts at these facilities; however, they would most certainly benefit from waste reduction and recovery efforts. Since there is no reporting requirement for these institutional entities, quantities and types of waste disposed or recovered in Chemung County has not been made available to the County. Program Strategy #16 in Chapter 6 is intended to address the issue of the lack of data being reported by these various entities. Additionally, Program Strategy #14 (Public Outreach and Education) will include the institutional recycling sector and how best to increase recycling efforts. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Chemung County's activities related to them, to determine what improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

3.2.9 Public Sector Recycling Efforts

Municipal recycling efforts in the Planning Unit revolve almost entirely around the County's program. Although the recycling efforts are managed for the County by the County, Program Strategy #1 in Chapter 6 focuses on increasing recycling at public facilities, such as public schools, municipal spaces, and special events. Additionally, Program Strategy #14 will assist with the data gathering, public outreach, and educational components. It will be important to understand the current recycling efforts within the public sector before determining the appropriate plan of action and goals; therefore, Program Strategy #16 will be an integral part with gathering the necessary data to assess the current recycling programs at the public sector level. Once the existing

recycling efforts are determined, a plan of action to reach out to public sector employees and community members will be developed through Program Strategy #1 to ultimately increase recycling efforts.

Chemung County's Department of Public Works also implements waste diversion efforts through their reuse of road millings during road resurfacing projects. Pavement that is removed during resurfacing projects is reused and not landfilled.

3.2.10 Industrial Facility Recycling Efforts

There are a number of industries located within Chemung County, such as Anchor Glass Container Corporation, CAF-USA Inc., Elmira Heating Treating, Hardinge, Inc. Hilliard Corporation, and Kennedy Valve. Information related to industrial recycling efforts was unavailable at the time this Plan was completed. As discussed in Chapter 6, Program Strategy #16 will be pursued to gather more data in the way of surveys to industrial facilities within the County, which in turn will be tied to Program Strategy #14 associated with the public outreach and education at the industrial facility level.

The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Chemung County's activities related to them, to determine what improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

3.2.11 Public Space / Events Recycling Efforts

Public space and special event recycling efforts are currently handled individually by each event sponsor or municipality. The impacts of special events within the Planning Unit are provided in Table 1-7 in Section 1.4.5 of this report. Program Strategy #1 contains some action items related to special events that will be evaluated during this planning period.

3.2.12 Processed Scrap Metal Recycling

According to research conducted by the US Environmental Protection Agency, recycling scrap metals can be quite beneficial to the environment. Using recycled scrap metal in place of virgin iron ore can yield[16]:

- 75% savings in energy

[16] http://www.norstar.com.au/Recycling/Processing/Benefits.aspx

- 90% savings in raw materials used
- 86% reduction in air pollution
- 40% reduction in water use
- 76% reduction in water pollution
- 97% reduction in mining wastes

Processed scrap metal is not currently monitored by Chemung County; however, through strategies discussed in Chapter 6, a method for gathering this information is proposed through Program Strategy #16. Once an understanding of how scrap metal is generated and processed or managed in Chemung County, then the next step would be to implement an educational program (Program Strategy #14) to disseminate information regarding the benefits of scrap metal recycling and the opportunities available for processing scrap metal.

3.2.13 Public Education Efforts to Promote Recycling

Chemung County recognizes the importance of educating the community on waste reduction, recycling and material recovery opportunities. To effectively manage these evolving programs, the County enlisted the assistance of Cornell University Cooperative Extension (CCE) to create programs that are locally focused and community centered. CCE interacts with children through schools, environmental field days, and youth related events and festivals. In order to help educate Chemung County residents in the design, construction and operations of the resource management facilities that exist within the County, NEWSNY gives landfill and MRF tours to local organizations and schools.

The County's other public education efforts are primarily on the website and at the MRF. Subtasks associated with Program Strategy #14 are included in the implementation schedule for maintaining the website and other education efforts, including compiling information regarding private sector education efforts, to determine what additional education efforts should be implemented by or on behalf of Chemung County.

3.2.14 Organic Wastes Diversion

Interest in organic waste diversion has increased over the last few years, particularly because it has the potential to divert a significant portion of the waste stream away from landfills. The composting process can be applied to yard waste, food waste, MSW, sewage sludge, non-hazardous industrial sludge, or some combination of these materials. Program Strategies #9, #10, and #11 in Chapter 6 are included in the implementation schedule for evaluating and

implementing recovery of these organics, including collecting data and information regarding organics generation and management in Chemung County, and investigating existing partnership opportunities such as supplying food waste and scraps to an existing anaerobic digestion or other composting facilities. Existing opportunities that are available are summarized in Table 3-3 below.

3.2.15 Yard Trimmings

Yard waste composting is a feasible means of waste reduction that requires little technological sophistication and could ultimately reduce the quantity of solid waste disposal in the County. Much of the Planning Unit's service area is rural and, like other rural areas around the state and the country, residents tend to manage yard trimmings on their own property. Therefore, materials collected for centralized composting are lower than in suburban areas where yard trimmings tend to be handled centrally.

In August 2009, an intern from the Chemung County Soil & Water Conservation District prepared a report titled Yard Waste Management Infrastructure and Composting in Chemung, NY, which is included as Appendix C. This report provides valuable information related to the infrastructure currently available within the County, challenges municipalities are facing related to yard waste composting, and success stories provided by municipalities with strong yard waste programs within and outside the county's borders. A summary of activities that Chemung County municipalities provide are summarized in the following table.

Table 3- 3 - Yard Waste Management Services by Municipality

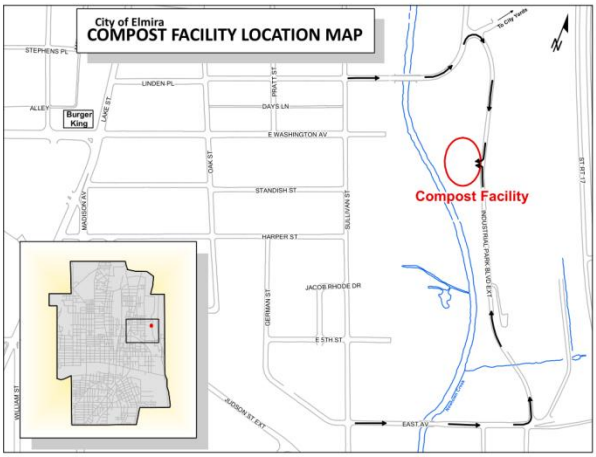
Municipality	System In Place	Responsible Party	Destination	Municipality Needs[1]
Town of Ashland[2]	Residents can drop off yard waste 2 times per year at a designated location.	Town of Ashland	Chipped and offered to residents.	None reported.
Town of Baldwin[1]	The Town picks up branches following storm events and takes them to the fire department. They are stockpiled on-site for some time and then buried. The Town does not manage any other organic waste.	Town of Baldwin	Brush debris buried.	Christmas tree drop off program.
Town of Big Flats [1,2]	Offers an organic material (brush, yard/garden waste, grass clippings, leaves) drop-off facility located next to the Community Center Parking Lot (agreement with Black Gold). They also provide a Christmas Tree collection program during the holiday season. Town picks up brush from residents for 2 weeks in April or after storm events. Town offers curbside leaf pickup for 6-8 weeks in October thru December.	Black Gold	All materials are brought to the Town's compost site, processed through a tub grinder, placed into windrows for composting, and finished compost (unscreened) is available to residents.	Better organization of the compost site.
Town of Catlin[1]	Brush or branches can be dropped off at a Town location where they are ground into wood chips. No other organics are managed by the Town.	Resident's yards are large enough to manage their own yard waste.	Wood chips are either thrown back in the woods or residents can pick them up for landscaping needs.	None reported.
Town of Chemung[1]	Brush or branches can be dropped off at a Town location where they are ground into wood chips. No other organics are managed by the Town.	Highway Department	Wood chips are either thrown back in the woods or residents can pick them up for landscaping needs.	Interested in having a compost program town-wide.
Town of Elmira[2]	Drop off yard waste behind the Town Highway Department's garage Monday thru Friday. Utilized the County's tub grinder. Provide seasonal leaf and tree limb collection program twice per year.	Town Highway Department	Compost made available to residents, and the remainder goes to Black Gold.	Would like to see a centralized location for the County's tub grinder as opposed to it travelling from place to place. Would like the County to provide education door hangers to notify residents about composting.

Municipality	System In Place	Responsible Party	Destination	Municipality Needs[1]
City of Elmira[1,2]	Curbside leaf pick up is available in the fall and Christmas tree collection is available after the holidays. The pick-up is done with front end loaders. Vacuum trucks are used if necessary. The City offers a program (Dial-a-truck) where a resident can request a truck to be left at his property overnight for them to load the truck with organic waste. A City worker picks up the truck and delivers the organic waste to the city compost facility. The service cost is $35/use. The City also offers residents the opportunity to drop off their organic wastes (brush, yard/garden waste, grass clippings or leaves) at the City's compost site.	City of Elmira Department of Public Works	Materials are composted at the City's compost site. A tub grinder is used to grind the material into mulch. The mulch is put in windrows for composting and turned 3 times per year. The mulch is provided to residents or to Black Gold.	None reported.
Village of Elmira Heights[1]	Brush is collected for 2.5 to 3 weeks in April and after any emergency (ice storms, etc.). Christmas trees are picked up for 2 months (January-February). A wood chipper is used to create wood chips. Yard waste materials from residents are collected by the Village and combined with the Elmira Correctional Facility's materials and composted. In the winter, residents must handle their own yard waste materials. The village does not manage grass clippings.	Village of Elmira Heights, Elmira Correctional Facility	Wood chips are stockpiled at parks for residents to use. Yard wastes are combined with Elmira Correctional Facility's compost. Final use not reported.	Educating their residents.
Town of Erin[1]	The Town collects and chips the branches found along roadways after storm events. The Town does not manage other organic waste. Resident's yards are large enough to manage their own yard waste.	Town of Erin	Wood chips are left for residents to pick up.	Christmas tree collection program.
Village of Horseheads[2]	Drop off yard Monday thru Thursday (9am-3pm). Utilize the County's tub grinder.	Village of Horseheads	Not reported.	
Town of Southport[1,2]	Residents can take brush, yard/garden waste, grass clippings and leaves to an area near Southport Correctional Facility to be composted. A tub grinder is used to grind the	Town of Southport	Black Gold or residents.	None reported.

Municipality	System In Place	Responsible Party	Destination	Municipality Needs[1]
	material into mulch. The Town also picks up leaves only (no brush) for 6-8 weeks in October – December. Christmas trees are also collected for 2 months following Christmas day.			
Town and Village of Van Etten[1]	Spring brush pick up event. Brush only, they do not take leaves.	Town of Van Etten	Brush is chipped and delivered to residents who request them.	None reported.
Town of Veteran[1]	Following emergencies, brush is collected and brought to the highway department for chipping. Typically they borrow the Town of Catlin's wood chipper. The Town does not manage any other residential organic waste.	Town of Veteran	Chipped wood is blown into the woods.	Creating a drop off location for organic wastes available to their residents.
Village of Wellsburg[1]	Yard materials are taken to an area near the ball fields where they are composted.	Town of Ashland or other municipalities	Town of Ashland handles with their organics program. Excess materials go to a farm field.	None reported.
Town of Horseheads[1,2]	Residential organic waste managed by Black Gold. The Town also collects tree brush/branches from the road, grinds them with a wood chipper, and generates wood chips. Wood chips and animal carcasses are composted together. The carcasses come from road kill and euthanized animals at the animal shelter. No other organics are managed by the Town.	Black Gold (residential) Town of Horseheads (brush, animal carcasses)	Yard waste is ground and sold as mulch. The compost generated from the wood chips and animal carcasses is not used.	None reported.

[1] Information presented in the August 2009 Yard Waste Management Infrastructure and Composting report.
[2] Information gathered by County personnel.

Based on a review of the August 2009 Yard Waste Infrastructure report and Table 3-3 above, there is a multitude of programs available to residents for organic waste management within the County. Six municipalities offer seasonal leaf pick up to their residents while eight (8) municipalities offer organic waste



drop off locations for their residents to use.

Chemung County currently possesses a tub grinder that is available to its municipalities for implementation of municipally run composting programs. A few of the municipalities in Table 3-3 utilize the County's tub grinder. If they elect to participate in the program, municipalities are responsible for providing the labor and fuel for the machine. Along with this municipally geared program, the Soil & Water Conservation District is also an outstanding resource for individuals with an interest in backyard composting. Guides to organic waste management are available from the District. Both plastic and wire compost bins are also available for purchase at the Soil & Water Conservation District Office.

Information regarding the municipalities' programs is still lacking and in many instances can be enhanced; and therefore, Program Strategy #16 in Chapter 6 includes evaluating and implementing recovery of these organics, including collecting data

3.2.16 Food Scraps/Food Processing Waste/Food Banks

There are no known food waste collection programs or food processing facilities within Chemung County. Food waste collection programs are not currently monitored by Chemung County; however, through implementation tasks discussed in Chapter 6, a method for gathering this information will be developed as part of Program Strategy #16. Once an understanding of how food waste is processed or managed in Chemung County, then the next step would be to implement an educational program (Program Strategy #14) to disseminate information regarding the benefits of food waste collection or composting programs.

3.2.17 Biosolids/Sewage Sludge Handling

According to NYSDEC records, biosolids/sewage sludge generated in Chemung County were managed as identified in the following table, Table 3-3. Additional details related to these facilities are provided in Table 2-1 in Chapter 2.

Table 3- 4 - Municipal Sewage Sludge Disposal Summary

Facility Name	Disposal Destination
Baker Road Facility	Chemung County Landfill via Chemung Co. Elmira Sewer District
Chemung County Elmira Sewer District STP	Chemung County Landfill
Chemung County Sewer District #1 STP	Chemung County Landfill

3.3 Status of Existing Recovery Efforts

As demonstrated in the previous section, Chemung County's residents and commercial, industrial and institutional waste generators have several outlets to divert their waste from disposal to reduction, reuse and recycling. However, unlike solid waste data that is reported to the NYSDEC annually, a complete set of waste diversion data is not readily available since much of it is not required to be reported by private entities to any agency (except for those facilities that must submit recycling reports to NYSDEC). At this time, the majority of the residential and light commercial recyclables data has been reported by the recycling centers and is summarized in Table 2-2 in Chapter 2. Private businesses within the County are not currently required to report the destinations of their recyclables. As referenced in Table 2-2 in Chapter 2, based on 111,193 tons of waste (including recyclable materials) generated within Chemung County in 2010, 102,215 tons were disposed in landfills and 8,978 tons of materials were diverted either by composting or recycling. Consequently, Chemung County's current overall waste diversion rate is estimated at 8.1%. When examining just the MSW component of the overall waste stream, the County's MSW diversion rate is estimated at 11.5% -- this excludes contaminated soil, sewage sludge, construction and demolition debris, processed scrap metal, and industrial waste.

Since there is no reporting requirement for these entities, quantities and types of waste disposed or recovered in Chemung County has not been made readily available to the County. Program Strategy #16 (Recycling Surveys and Reporting) in Chapter 6 is intended to address the issue of the lack of data being reported by these various entities. Additionally, Program Strategy #14 (Public Outreach and Education) will include the various recycling sectors and how best to increase recycling efforts. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Chemung County's activities related to them, to determine what improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

3.4 Markets Discussion

The County contract with NEWSNY allows full operational control of the County MRF as well as responsibility for marketing and sale of the materials. NEWSNY has 30 years of experience in the recycling industry which allows them to provide expertise in marketing of recycling materials.

Due to the high capital investment needed to build a state-of-the-art zero sort processing facility, Chemung and NEWSNY have chosen to utilize the existing MRF to consolidate recyclable materials collected within the County and transfer the raw materials to the Ontario County Zero-Sort® Facility in Stanley, New York. Materials are aggregated with other materials from the region. The benefit of aggregating, combined with state-of-the-art technology maximizes recovery and minimizes residue. Included with the shift to single stream was the increased ability to add plastics numbered 3-7 to the list of acceptable commodities. Prior to the change to single stream recycling only plastics numbered 1 and 2 were accepted for recycling.

Currently, material shipped to the Ontario County Zero-Sort® Facility is sold primarily to domestic markets with a lesser volume sold internationally. NEWSNY audits outlets for legitimate business practice and end uses.

Due to the competitive nature of recycling markets, specific outlets are not listed in this Plan because NEWSNY considers these markets proprietary and confidential business information. NEWSNY's operations of several MRFs located throughout the State and New England means that they have more associated tonnage to leverage. This increased volume gives them an expanded ability to market these materials.

NEWSNY actively evaluates the demand for markets and aggressively pursues opportunities. Currently NEWSNY is working to expand the markets for recycling 3-7 plastic container mix, aseptic packaging (broths, soy milk, soups) and bulky rigid plastics (toys, five gallon pales, laundry baskets). If these market opportunities become established outlets for the Ontario County Zero-Sort® Facility, acceptance of these materials will become available at the Chemung County MRF.

Although the County relies on the expertise of a contractor to operate the County owned facilities, it also supports both municipal and private industry development for collection, processing and market opportunities of all recoverable materials and monitors the general markets for recyclables, Appendix D identifies current markets for recyclables that are collected at the Chemung County MRF.

Through the Chamber of Commerce, the County will encourage businesses to register with the Empire State Development Authority database to promote their business www.empire.state.ny.us.

Chapter 4 – Future PU projections and SW changes

Previous sections of this Plan discussed the quantities of waste generated, disposed and diverted from the waste stream. This section will present the projected MSW diversion rates as well as the projected C&D debris diversion rates for the duration of the planning period. Recycling rate projections were increased over the course of the planning period. These future waste generation projections are depicted in the tables provided in Appendix A.

As previously indicated, the data reported in this Plan was based on the best available data at the time this report was prepared. Future tasks in the Implementation Schedule include improving data gathering methods and reporting to improve upon the County's known data. With the help of improved data, the County will have a clearer picture of the programs that should be evaluated and implemented.

4.1 Anticipated Changes to the Local Planning Unit

Chemung County has experienced a steady decrease in population over the past four decades. U.S. Census data reveals that Chemung County's population decreased from 101,537 in 1970 to 97,656 in 1980, to 95,195 in 1990, and to 91,070 in 2000. This continuing trend has been attributed to several factors, including the limited availability of full-time employment opportunities for skilled and unskilled workers, increasing property tax burdens, and an aging population. The County's population in 2009 was estimated by the U.S. Census Bureau to be 88,831 persons. The largest estimated municipal population change between 2000 and 2009 occurred in the Village of Elmira Heights, which experienced an estimated population loss of 6.08% during that period. The City of Elmira and the Town of Southport experienced estimated population losses of 5.27% and 5.13%, respectively. By contrast, the Towns of Big Flats and Catlin experienced estimated population gains of 4.91% and 1.85%, respectively, between 2000 and 2009.

Baseline population projections reflecting these historical trends have been developed by the New York State Information System (NYsis) and analyzed by Cornell University's Program of Applied Demographics, an affiliate of the U.S. Census Research Data Center network. Chemung County's population projections indicate a decrease in the County's total population from its present level to 83,282 in 2015, 80,643 in 2020, 77,773 in 2025, 74,614 in 2030, and 71,237 in 2035. The baseline population projections noted are not forecasts of future population size; they simply project population levels that would be expected if current life expectancy, birth, and net migration rates continue unchanged in future years.

The Planning Unit anticipates making changes as opportunities arise through the evaluations of the program strategies identified in Chapter 6 – Solid Waste Management Program Strategies.

4.2 Anticipated Changes to the Waste Stream

Over the course of the previous planning period, changes to the waste stream have occurred nationally, which includes local trends in Chemung County as well. Consumers have moved towards a throw-away society where one-time use products are preferred for convenience sake as opposed to environmental concerns. In addition, products are nearly obsolete before they even hit the shelves. Household items, such as thermostats, electronics, batteries, contain harmful chemicals such as mercury, Freon, and heavy metals. Both proper disposal and diversion are keys aspects of solid waste management today. Education is an integral component to changing the solid waste management practices nationally, as well as locally.

Based on the declining population trends referenced above, and absent the promise of new industry, it is the opinion of the County that the amount of waste produced within its borders will parallel the population's downward trend.

It is anticipated that with the implementation of this Plan, more opportunities for waste diversion will be made to residents, which should in turn increase the County's waste diversion percentage. Chapter 6 will describe the various programs that will be made available to County residents and how these tasks and goals will be implemented.

Chapter 5 – Alternative Technology Evaluation

The objective of the alternatives technology evaluation is to provide an overall summary of the alternatives available to Chemung County related to waste management and recycling technologies. In order to account for this required element of an LSWMP, NYSDEC has generated a reference document, known as "Generic Technology Assessment for Solid Waste Management" that may be utilized for completing the evaluation of alternative treatment or disposal technologies. Section 5.1 below provides a general overview of the different disposal technologies that are available, which the County will continue to monitor with regard to their successes and challenges throughout the planning period. Section 5.2 briefly discusses the different recovery options that the County may examine during the planning period to determine if their recyclables recovery efforts should be modified. The technologies summarized below will be evaluated for feasibility and cost effectiveness on an individual basis depending on staff and resource availability.

5.1 General Overview of Disposal Technology Options Available

Landfilling

Chemung County has used landfilling as its method of solid waste disposal since at least 1973. The active landfill site, the Chemung County Landfill, is located on the north side of County Route 60 in the Town of Chemung, approximately 5 miles northeast of the City of Elmira, New York. The landfill is part of a 434-acre parcel of land currently owned by Chemung County which encompasses the active Chemung County landfill, the closed Chemung County MSW landfills (also known as Areas 3 and 5), the active C&D debris landfill, and the closed C&D debris Landfill (Area 2). The Chemung County Landfill is approximately 30 acres in size and is located on the central portion of the landfill site.

The landfill accepts Chemung County waste, as well as surrounding counties in New York and Pennsylvania for disposal. The landfill is permitted to accept 180,000 tons of MSW per year. At this tonnage, it is projected that the site has approximately 1.8 years of capacity remaining as of January 1, 2014.

The County recently completed SEQRA review on a proposed lateral expansion of the existing landfill facility. The project encompasses approximately 45 additional acres of lined landfill to the south and east of the existing landfill, 17.6 acres of overlay liner on the existing landfill, 19 acres of disturbance associated with the soil borrow area and approximately 40 acres associated with the landfill gas to energy facility and additional support infrastructure for the operation of the landfill, including the landfill berms, access roads, and leachate storage lagoons. A 6 NYCRR Part 360 permit

application has recently been submitted for the first phase of the expansion covered under SEQRA, which includes a 33.5 acre lateral expansion of the landfill, 10.8 acres of overlay liner onto the existing facility, 18.9 acres of soil borrow area, and expansion of the site's leachate storage lagoon.

Should the permitted airspace be completely consumed and the County does not receive a permit to expand the landfill, waste exportation would need to be pursued.

This LSWMP is intended to establish the framework and programs that will be implemented over the next ten years and providing available options to the County for solid waste management. Several of these options are briefly summarized below.

Waste-to-Energy (Combustion/Incineration)

A waste-to-energy (WTE) facility is a solid waste management facility that combusts wastes to generate steam or electricity and reduce the volume of MSW requiring disposal by 80-90 percent. These facilities are sometimes referred to as resource recovery facilities or Municipal Waste Combustors (MWC). Newer technology allows higher efficiency heat recovery from the combustors, increasing energy production potential.

Although the total volume of MSW requiring disposal is reduced, a secondary disposal method such as landfilling would be required for the ash. If Chemung County initiated the permitting, construction and operation of their own WTE facility within the County, high construction and operations and maintenance costs as well as uncertainty in energy sales revenues, would result in higher disposal costs per ton than landfilling in Chemung County. For example, a 600 ton per day WTE facility capital cost could be in the range of $160 million with an average per ton cost of $92/ton. This would not be economically feasible for the County. In addition, Chemung County maintains a landfill that has been permitted by the NYSDEC.

There are currently ten (10) active WTE facilities in the State; however, none have been permitted or constructed in the State in the past 20 years.

Pyrolysis/Gasification

Pyrolysis systems use a vessel which is heated to temperatures of 750°F to 1,650°F, in the absence or near absence of free oxygen. The temperature, pressure, reaction rates, and internal heat transfer rates are used to control pyrolytic reactions in order to produce specific synthetic gas (syngas) products. These syngas products are composed primarily of hydrogen (H_2), carbon monoxide (CO), carbon dioxide (CO_2), and methane (CH_4). The syngas can be utilized in boilers, gas turbines, or internal combustion engines to generate electricity, or alternatively can be used in the

production of chemicals. Some of the volatile components of MSW form tar and oil, and can be removed for reuse as a fuel. The balance of the organic materials that are not volatile, or liquid that is left as a char material, can be further processed or used for its adsorption properties (activated carbon). Inorganic materials form a bottom ash that requires disposal, although it is reported that some pyrolysis ash can be used for manufacturing brick materials. Under typical operations, the ash is landfilled.

Gasification is a similar process to pyrolysis, but which requires the partial oxidation of a feedstock to generate syngas. Oxygen must be provided for the reaction, but at a quantity less than is required for complete combustion. The primary syngas products are H_2 and CO with smaller quantities of CH_4 produced at lower temperatures. Similar to pyrolysis, the syngas product may be used for heating, electricity generation, fuel, fertilizers or chemical products, or in fuel cells. Byproduct residues such as slag and ash are produced and require disposal in a landfill.

Pyrolysis and gasification of MSW have too short a history in the United States for complete analysis of economic feasibility. There are currently about one hundred mixed MSW gasification plants in the world, primarily in Japan, that have a successful history of continuous operation. The capital cost of developing this technology for Chemung County is estimated to be at least 10% higher than conventional WTE plants. This conceptual estimate is based on a short history of pyrolysis/gasification development for MSW applications in the United States, a lack of established pyrolysis or gasification plants and the greater complexity of the technology. According to a recent EPA study[17] of pyrolysis and gasification technologies, the cost to process mixed MSW is approximately $90 per ton which is significantly higher than landfill operational costs in New York State. There are no current full scale operational systems in New York State for MSW treatment. One plant for the pyrolysis of plastics, which has since closed, was previously located in Niagara Falls, NY and one gasification plant has been commissioned in Montgomery, NY using only portions of the MSW waste stream.

Mixed Municipal Solid Waste Composting

Mixed MSW composting is typically an aerobic composting process that breaks down all organic portions of the waste into compost material. Waste is typically collected at the facility as a mixed stream. The process requires intense pre- and post-processing, treatment and sorting to remove inert materials such as plastic or glass, which diminish the quality of compost products. Some MSW composting facilities also accept biosolids/sewage sludge. Wastes are typically loaded into a rotating bioreactor drum for two to four days. Screening processes are used to separate unacceptable wastes, which are landfilled as process residue, from the raw compost which is stored in

[17] State of Practice for Emerging Waste Conversion Technologies, USEPA Office of Research and Development, October 2012

a maturation area for approximately one month to allow biological decomposition to occur.

Facilities such as this do not have a well-established track record in the United States. There are currently 13 mixed MSW composting facilities in operation in the United States, including one in Delaware County, New York. Typical issues associated with the reliable and cost effective operation of such facilities include quality of compost, retail/wholesale outlet for compost generated, disposal location for bypass material, and odors.

As mentioned above, Delaware County operates a mixed MSW composting facility, which has been successful as it relates to their needs. Their facility met the need of extending the life of their current landfill facility due to declining capacity and difficulty in siting a new landfill. This facility allowed the landfill to be operational for another 50 years. The cost of this facility was approximately $20 million, which includes a rather complex odor control component. The facility became operational in 2007, which serves a rural population of about 47,000 people. This facility handles approximately 100 tons per day of waste materials, consisting of a blend of MSW and biosolids. The mixed MSW composting facility is one part of Delaware County's integrated solid waste management system.

Plasma Arc Gasification

Plasma arc gasification is a waste treatment technology that uses electrical energy and the high temperatures created by an electrical arc gasifier. This arc breaks down waste primarily into elemental gas and solid waste (slag), in a device called a plasma converter. The process has been touted as a net generator of electricity, although this will depend upon the composition of input wastes. It will also reduce the volume of waste requiring land disposal.

There are currently 10 plasma arc gasification facilities in operation in Japan and Taiwan, but only one that operates on a large scale (all others are < 50 TPD) and uses mixed MSW as its only feedstock. A small MSW facility (93 TPD) is in operation in Canada. In the United States, St. Lucie County in Florida obtained a permit to construct a large scale MSW plasma arc gasification facility, but due to vendor and funding issues this project was never implemented.

To date, this technology has not been proven to be economically feasible within the United States for MSW management.

Mechanical/Biological Treatment

Mechanical-biological treatment (MBT) systems are similar to mixed MSW composting systems in that intense sorting is required as the first step in the waste treatment process. This is considered the mechanical phase of the treatment, where recyclable and non-organic materials are removed from the waste stream, prior to the biological treatment. The biological treatment phase involves bio-drying of the remaining organic materials for production of refuse derived fuel, or RDF. RDF can be used in place of fossil fuel products, such as a replacement for coal in electricity production. There are currently over 70 active MBT systems in operation across Europe, with a majority of these facilities operating as pilot scale projects (exact numbers are not available).

To date, this technology has not been proven to be economically feasible within the United States for MSW management.

Anaerobic Digestion

Anaerobic digestion is a biological process by which microorganisms digest organic material in the absence of oxygen, producing a solid byproduct (digestate) and a gas (biogas). In the past, anaerobic digestion has been used extensively to stabilize sewage sludge, but is more recently under consideration as a method to process the organic fraction of MSW. In anaerobic digestion, biodegradable material is converted by a series of bacterial groups into methane and CO_2. In a primary step called hydrolysis, a first bacterial group breaks down large organic molecules into small units like sugars. In the acidification process, another group of bacteria converts the resulting smaller molecules into volatile fatty acids, mainly acetate, but also hydrogen (H^2) and CO_2. A third group of bacteria, the methane producers or methanogens, produce a medium-Btu biogas consisting of 50-70% methane, as well as CO_2. This biogas can be collected and used for a variety of purposes including electricity production or converted to high BTU natural gas. Anaerobic digestion facilities are utilized extensively for the treatment of agricultural, wastewater sludge and organic wastes such as food wastes. Mixed MSW anaerobic digestion facilities are more common in foreign countries. There are currently over 200 MSW anaerobic digestion facilities operating across Europe. Many of these facilities are smaller scale projects, designed to provide treatment of wastes for small towns and villages. There are two such facilities in operation in Canada, each in the Toronto, Ontario area.

Specific to the United States, few mixed MSW anaerobic digestion facilities exist, as the technology has not proven economically feasible. An EPA study[18] estimates that

[18] State of Practice for Emerging Waste Conversion Technologies, USEPA Office of Research and Development, October 2012

waste processing costs using anaerobic digestion are close to $115 per ton of MSW, which is even higher than pyrolysis/gasification. At this time, only two commercially operational MSW anaerobic digestion facilities exist, both in Ohio. Several more facilities exist but accept only a portion of the MSW waste stream, such as source separated organics, food manufacturing industry waste, or a mixed agricultural/food waste. Many are still in a demonstration phase and are not fully operational. In New York State, there are many anaerobic digesters in operation in the wastewater and agricultural markets, with some anaerobic facilities being converted into mixed organic waste facilities. Two anaerobic digesters have been permitted in Region 9 by Quasar Energy Group. These systems will manage regional biomass residuals (organic waste) to produce electricity that would be sold to NYSEG. Under the regional biomass residual model, there is still the need to manage other portions of the waste stream that cannot be recycled. In addition, digestate and liquids from the anaerobic digester process must also be managed, which may be recycled, landfilled or processed at a wastewater treatment plant depending on their constituents.

Ethanol Production

Ethanol production from a mixed MSW waste stream requires an intensive sorting process as the first processing step. All recyclable and inert materials must be removed to produce an organic waste stream for ethanol production. This material is then chopped, fluffed, and fed into a hydrolysis reactor. The effluent of this reactor is mostly a sugar solution, which is prepared for fermentation. This solution is detoxified and introduced to a fermenter, in which microorganisms convert the sugar to ethanol and CO2. Next, the solution is introduced into an energy-intensive process that combines distillation and dehydration to bring the ethanol concentration up to fuel grade (99%) ethanol. A solid residue of unfermented solids and microbial biomass is recovered through the anaerobic digestion process, and its marketability as a compost material depends on the purity of feedstock as well as its visual quality. Solid residues can be burned or gasified if alternative methods of reuse are not feasible. Various pilot scale facilities are operating in the United States and Europe, but many have reverted to more homogeneous feedstocks such as wastewater treatment sludge and food processing wastes, because obtaining the homogeneous input stream from mixed MSW has proven difficult.

Technology Assessment Conclusions

Based on the technologies discussed above, the expansion of the Chemung County Landfill appears to be viable; however, a separate environmental review process now will examine the environmental benefits and impacts associated with this option. Should any of the other technologies discussed above be pursued in the future, futher analysis and a separate environmental review process would be required to

analyze the benefits and impacts of these technologies. In addition, should any of the other technologies discussed above be implemented, it is imperative that long term waste commitments be in place to undertake a full scale program within Chemung County. Chemung County does not propose further evaluating the feasibility of these other alternative waste disposal options during the 10 year planning period; however, Chemung County does acknowledge that they are available and will keep abreast of their further development. Should advances in the above technologies occur, the County will reassess these opportunities during the next planning period.

5.2 Alternative Programs for Recyclables, Organics, Waste Reduction and Reuse

Similar to alternative waste technologies, there are various programs, legislation, or technology options for a communities waste reduction program. Below is a discussion of several of these options available.

Composting of Organic Waste (yard waste, food waste, biosolids)[19]

Composting of organic materials from the solid waste stream not only provides a valuable benefit to nutrient deficient soils, but also reduces the amount of waste that ends up in landfills or incinerators. Other benefits of composting organic matter include the increase in beneficial soil organisms such as worms and centipedes, suppression of certain plant diseases, the reduced need for fertilizers and pesticides, prevention of soil erosion and nutrient run-off, and assistance in land reclamation projects.

In New York State, thousands of tons of organic waste materials are composted each year. These include treated sewage sludge, otherwise known as biosolids/sewage sludge from waste water treatment plants (WWTPs); food waste residuals from industrial food processing facilities; food waste from recovery programs at hospitals, colleges, office buildings, and prisons; paper sludge; yard waste and other organic waste materials.

Currently, there are sixty-four (64) facilities permitted for composting in New York State. Of these, twenty-six (26) compost biosolids/sewage sludge, thirty-four (34) compost yard wastes, and four (4) compost food and other mixed wastes.

Material resulting from the composting of biosolids/sewage sludge and yard waste is used primarily as an organic soil conditioner and partial fertilizer. It is applied to agricultural lands, recreational areas such as parks and golf courses, mined lands, highway medians, cemeteries, home lawns and gardens.

[19] http://www.dec.ny.gov/chemical/8798.html

Single Stream Recycling

Single-stream recycling is a system that collects all paper fibers and commingled containers together in one collection truck. In a single-stream recycling system, the materials are commingled and no longer separated by the residents at the curb and hauled to the recycling facility in separate compartments in the collection vehicle. In single-stream, both the collection and the processing systems must be designed to handle this fully commingled mixture of recyclables.

The single-stream philosophy of recycling has firmly taken hold in many areas of the country where weather conditions and port access eased operational concerns. Hundreds of North American and European cities annually shift to single stream recycling. A 2005 R.W. Beck survey stated that 11 percent of the U.S. population with curbside recycling service was single-stream. By 2007, that number had increased to 50 percent according to the American Forest and Paper Association.

The advantages of a single-stream system are associated with slightly higher recycling rates and reduced collection costs. The disadvantages of the system are associated with initial capital costs for upgrading of the materials recovery facilities, higher sorting and processing costs, higher residual rates (i.e., non-processable material sent to the landfill), and higher contamination of recyclable paper, making the recovered material less marketable.

Expansion of Mandatory Materials

In many communities, mandatory recyclables lists are outdated and do not align with the current recycling markets. It is important to ensure that local laws and requirements are consistent with market conditions and technological advances. In recent years communities are reviewing these lists.

Hauler Licensing

To provide stricter oversight of the haulers responsible for collection of solid waste and recyclables, some communities opt to require hauling companies that collect, transport or dispose of discarded materials (garbage, recyclables or compostables) to be licensed by the municipality in which they are performing these services. Hauler licensing allows municipalities to gain access to data on amounts of material collected and managed.

Management of Household Hazardous Waste[20]

Many common household products contain hazardous substances. These products become HHW once the consumer no longer has any use for them. Many communities have established programs to manage HHW. The impetus for starting a HHW program can come from the grassroots level, from local or state government agencies, from community groups, or from industry. The number of HHW collections in the United States has grown dramatically over the last decade. Since 1980, when the first HHW collection was held, more than 3,000 collection programs have been documented in all 50 states.

Although programs vary across the country, most include both educational and collection components. Communities usually begin a HHW program by holding a single-day drop-off HHW collection. Organizing a collection event is an important first step in reducing and managing risks associated with HHW.

Some communities hold annual or semiannual collections, while others have established permanent HHW collection programs with a dedicated facility (open at least once each month) to provide households with year-round access to information and repositories for HHW. In addition, communities have initiated pilot programs for curbside pick-up by appointment, neighborhood curbside collection programs, and drop-off programs for specific types of HHW.

The efforts of communities across the country provide a wealth of experience for other communities beginning HHW management programs. As the number of these programs continues to grow, public awareness about HHW will also grow, and the environmental problems associated with improper storage and disposal of HHW are likely to decrease.

C&D Debris Recovery

There are currently no front- or back-end separation requirements/regulations for C&D waste (other than for LEED projects). While there are many materials in the C&D waste stream that have potential reuse/recycling options, low tipping fees at area landfills can make the division of these materials into desirable components cost-prohibitive. However, as commodity markets and quantities allow, contractors, residents and construction demolition companies separate materials (such as metals, masonry, asphalt, etc.) for profitable reuse and recycling. As with most post-consumer items, methods of C&D debris sorting usually happen at the source or at a separation facility.

[20] U.S. EPA Solid Waste and Emergency Response Household Hazardous Waste Management – A Manual for One-Day Community Collection Programs. August 1993

Either option takes financial or operational resources that may or may not justify the end-product.

Flow Control Legislation

Flow control legislation allows local governments to direct solid waste and/or recyclables to designated facilities to ensure a continuous source of revenue and eliminates the possibility that any portion of the municipality's waste stream could be diverted,

Thirty-five states (including New York) as well as the District of Columbia and the Virgin Islands directly authorize flow control, while four additional states authorize flow control indirectly through mechanisms such as local solid waste management plans or home rule authority. In New York, a municipality is usually specifically authorized by the State Legislature to adopt flow-control legislation. Unlike other states, New York explicitly states that flow control may cover source-separated recyclable materials. Currently, there are 37 municipalities in New York State (i.e., districts, towns, counties, authorities) authorized by the State Legislature to enact flow control legislation covering approximately 80 percent of the state's population. Although flow control is authorized, many municipalities or Planning Units do not enforce it.

Pay-As-You-Throw

In areas where Pay-As-You-Throw (PAYT) is an option for waste collection, residents are charged a fee for municipal solid waste collection based on the amount of waste they dispose of. According to the Environmental Protection Agency (EPA), this concept creates a direct economic incentive to recycle more and to generate less waste. PAYT programs allow residents to treat waste collection as a utility and pay only for the service they actually use. Most communities that use a PAYT program operate municipal hauling and charge their residents a fee per bag or per can of waste. In a small number of communities, residents are billed based on the weight of their trash. All of these variations on the PAYT programs allow residents to pay less for waste disposal if they recycle more and throw away less waste.

There are many variations to the PAYT program. The program allows customers to select the appropriate number or size of containers for their standard weekly disposal amount. The bag program allows customers to purchase bags, often printed with special logos for different haulers, and dispose of waste in these specially marked bags. The price of each bag incorporates the cost of collection, transportation and disposal of the waste. The more bags customers use the more they are paying for waste collection and vice versa. The tag and sticker program allows customers to purchase tags or stickers, which are often specially marked for different haulers, and place these tags or

stickers on their garbage bags. This program is similar to the bag program, only using tags and stickers instead of specialty bags.

Hybrid PAYT programs vary greatly from community to community. An example of a hybrid program would be offering residents a limited collection (e.g., a limit of five bags per week) with any additional bags being bought at a per bag fee from the municipality, hauler, etc. In this type of program, the initial cost of service is often billed to the residents in the form of taxes or quarterly bills through the municipality or hauler. Weight based programs use a modified scale located on the waste collection trucks and charge customers based on the actual pounds of garbage set out for disposal. On board computers record weights by household and customers are billed on this basis.

As with any program, there are advantages and disadvantages. Some of the advantages and disadvantages of the PAYT programs are listed below:

Advantages:

- PAYT programs are a fair way to charge customers. Customers who dispose of more waste pay a higher cost than those who recycle more and dispose of less waste.
- PAYT programs do not place restrictions on customer choices. Customers are not prohibited from putting out additional garbage, but those who want to dispose of more garbage will pay a higher fee.
- PAYT programs are generally inexpensive to implement. They may also help prevent overuse of solid waste services.
- PAYT programs encourage waste reduction in the form of recycling, composting, and source reduction.
- PAYT programs can be implemented in a variety of sizes and types of communities, with a broad range of collection methods.
- PAYT programs offer environmental benefits by reducing the amount of waste sent to a landfill and recycling more of the products used by residents.

Disadvantages:

- PAYT programs may raise concerns regarding illegal dumping.
- PAYT programs can be a concern for large poor families who cannot afford to pay for the amount of waste they dispose.
- PAYT programs can be hard to implement at first if communities are unwilling to embrace the change that the program requires.
- Implementing PAYT programs (e.g., purchasing of stickers, cans, bags, etc, retrofitting waste trucks, employee reassignment, etc.) can prove challenging.

Education and Outreach

Public outreach and education regarding waste diversion programs and responsible disposal of special wastes has been identified as a key component of solid waste management programs in New York State. Raising the awareness of reduce, reuse and recycle has been a goal of the NYSDEC since the first Earth Day in 1970. To reach audiences, numerous programs and events have been organized. The NYSDEC's Recycling Outreach and Education program is available to other communities to help them spread the word. Without education none of the recovery programs or technologies will be successful.

Chapter 6, Solid Waste Management Program Strategies, will provide an overview of the subtasks anticipated to be undertaken during the course of this planning period to improve the County's waste diversion rate.

Chapter 6 – Solid Waste Management Program Strategies

The purpose and statutory framework for the Chemung County Solid Waste Management Plan is described in the Executive Summary.

Based on the data gathered and discussed in the preceding Chapters, the County has identified program strategies to work toward during a ten-year LSWMP planning period that is consistent with the State Solid Waste Management Policy. The strategies set forth below were identified with the goal of further enhancing the reuse and recycling of materials generated in Chemung County to reduce the quantity of materials requiring disposal, while providing for the means to recover energy in an environmentally sound manner from solid waste that has not been reused or recycled. Each strategy and corresponding goal will be further evaluated for feasibility and cost effectiveness on an individual basis according to the implementation schedule included in Chapter 7.0.

The NYSDEC's rules and regulations for Comprehensive Solid Waste Management Planning (Subpart 360-15 of 6NYCRR Part 360) require that all solid waste management plans provide for the management of solid waste within the planning unit for a minimum of a ten-year period. Since the County's current LSWMP has expired, LSWMP planning period will be the 10-year period beginning January 1, 2016 and expiring December 31, 2025.

The County can address and report any changes to their solid waste planning efforts that take place over the 10-year planning period to the Department as part of the solid waste management plan compliance reports that Chemung County is required to prepare and submit to the Department every two years. An example outline of a compliance report is included in Appendix E for reference.

6.1 Program Strategies to Increase Recyclables Recovery

Throughout the past 20 years, the County has identified waste streams that have come to light as candidates for additional recycling programs. This can be either through a sudden increase in volume of certain materials (phone books and electronic waste), developing markets or the realization of the need to handle wastes in special ways (pharmaceutical waste). A few examples of such programs were previously discussed in Chapter 3 – Existing Program Description.

Chemung County understands that various tasks will need to be completed to promote a successful recyclables recovery program. The following sub-sections summarize solid waste management program strategies that encourage greater waste diversion and more recycling.

Program Strategy #1 – Increase Recycling at County Facilities

Chemung County is interested in taking the initiative to promote recycling at county owned facilities. Chemung County will act as a model to other municipalities within Chemung County to increase recycling by their staff. Chemung County realizes that in order to increase recycling county-wide, their staff must be on board to achieve this goal. Through the development of an internal sub-committee, Chemung County staff will prepare a plan to increase recycling at county owned and/or operated facilities. Later in the planning period the sub-committee will review how to expand this goal to public events, schools, institutions, etc. given the lack of participation and information specified previously in Chapter 2. The implementation schedule in Chapter 7 provides an outline of the resources and subtasks necessary to increase recycling at county owned facilities.

Goal: Increase recyclables recovery at County owned and/or operated facilities.

Program Strategy #2 – Construction & Demolition Debris Recycling

During this planning period, Chemung County will set a C&D material recycling goal for County funded projects. While this goal may or may not be mandatory, it will serve to encourage contractors performing construction and demolition work for Chemung County to commit to meeting the diversion goal, or provide documentation as to why the goal could not be met. This will set an example for other municipally funded work in the County, as well as providing a way to jump-start the coordination of C&D debris recycling options between waste handlers and contractors.

Goal: Increase diversion of C&D or remodeling debris from the landfill.

Currently, landfilling C&D waste is more economical than recycling it in most cases. As of the preparation of this LSWMP, there are no known full scale mixed C&D waste recycling facilities in operation in the vicinity of Chemung County. However, the siting of C&D debris recycling facilities are on the rise throughout New York State. During the planning period, Chemung County, through economic development, will explore opportunities that would encourage private entities to consider siting a C&D debris recycling facility within Chemung County. Concurrently, one method the County will explore as a means to encourage C&D waste diversion, without incurring costs that would be associated with developing new infrastructure, would be to encourage the separation of portions of the waste stream at the source. Wood and masonry materials can be recycled if properly separated from other materials. Other aspects of the program that could be expanded include recovery and sale of usable pallets from the C&D waste stream. A third party builder could be considered for recovering and repairing slightly damaged pallets or the damaged pallets could be sent for energy

extraction. Also, the use of select clean C&D materials as fill material for embankments or roadways will be examined further.

Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to implement this task.

Program Strategy #3 – Product Reuse Collection and Distribution Programs

Product reuse is one of the most efficient forms of recycling. Chemung County proposes to assess the feasibility of providing a system by which their residents can drop off used, but still usable items free of charge. Items would be salvaged from the existing recycling streams, such as bulk metal, book recycling, small appliances, construction materials free of nails or screws, and used electronics recycling. These items would then be made available to residents for a fee. Additional reuse centers are available to county residents, such as, Salvation Army, Volunteers of America, Good as New Swap Shop, Pookies Little Britches, Purple Iris, and Pennies from Heaven. Chemung County will encourage these types of reuse centers throughout Chemung County for increased convenience to residents. Economic development partners such as, IDA, Chamber of Commerce, and Southern Tier Economic Growth, will be instrumental in developing additional reuse centers.

Goal: Promote product reuse to increase waste diversion.

A Materials Exchange program is an alternative product reuse outlet. Materials exchanges facilitate the exchange of materials or wastes from one party, which has no use for that material, to another party that views the materials as a valuable commodity. These facilities foster waste reduction efforts through the reuse of materials, thus eliminating the need to process the materials for recovery or disposal. These facilities are not regulated by the NYSDEC. Through economic development, the County would be supportive of a private or public entity developing a similar program within Chemung County. Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to implement this strategy.

Program Strategy #4 – Product Stewardship Framework

Product Stewardship is based on the concept that producers selling a product should be responsible for designing, managing, and financing a stewardship program that addresses the lifecycle impacts of their products, including end-of-life management. It is a nationwide undertaking to encourage government, at the State level, to implement product stewardship legislation based on the same framework principles in order to maintain a consistent starting point for nationwide implementation of a product stewardship policy. The New York Product Stewardship Council is working

Goal: Shift government funded waste diversion to one that relies on product stewardship.

to implement the principles of product stewardship in New York State. Chemung County intends to work together with the New York Product Stewardship Council to coordinate and participate in product stewardship initiatives locally. It is the intent of Chemung County to adopt these product stewardship framework principles through a resolution. Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to support this initiative.

Program Strategy #5 – Household Hazardous Waste Collection

Although specific household hazardous waste (HHW) generation data for the County is not easily obtainable, it is generally estimated that HHW makes up an average of 0.34% of the MSW waste stream. While this equates to a fairly minimal amount of material, the toxicity of this material makes it an important target for removal from the landfilled waste stream.

Goal: Increase collection rates and divert more HHW materials from disposal and wastewater facilities.

Historically NEWSNY and Cornell Cooperative Extension have sponsored two (2) Household Hazardous Waste events per year. These HHW events are held in the months of May and October each year, and are funded by NEWSNY to encourage the responsible disposal of various household materials. Chemung County residents must pre-register for the event, but may participate without incurring any charges for disposal. Materials accepted at these events include, but are not limited to; oil-based paints, thinners, used oil, pesticides, herbicides, fluorescent light bulbs, etc. These events will continue to occur throughout the planning period.

Program Strategy #6 – Expand Mercury Collection Program

It is well known that mercury is an extremely toxic substance that does not break down easily once released to the environment, and therefore its disposal needs to be controlled. Mercury is used in some consumer products; examples include thermometers, thermostats, and automotive switches. Compact fluorescent lamps (CFLs) contain a small amount of mercury; approximately 3-5 milligrams. Expended CFL's should be managed properly, in the same manner as other household hazardous waste products like paint, batteries and non-digital thermostats. Many CFL retail outlets, such as Lowes located in the Town of Big Flats, offer safe disposal or recycling.

Goal: Provide residents with a convenient and safe method of disposal of mercury containing devices.

Many residents use and discard batteries into the waste stream. Although waste batteries are a small amount of the solid waste stream, they are a concentrated source of some types of heavy metals. The main constituents of concern for human health and the environment include: cadmium, lead and mercury.

Reusable/rechargeable batteries are preferred over single-use batteries provided the rechargeable batteries are recycled after their useful life is over. As of June 8, 2011, New York retail locations that sell rechargeable batteries are required to accept used batteries of the same type for recycling. Additionally, as of December 15, 2011, it is against the law for New Yorkers to knowingly dispose of rechargeable batteries in the garbage.

Currently, residents may drop off mercury containing materials at HHW events, which are typically held twice a year. Also, retailers like Staples and Lowes in the Town of Big Flats accept batteries for recycling. The County will develop an inventory of drop-off locations for the proper disposal of mercury containing products such as thermometers and thermostats, which will be maintained and updated on the County's website. Chapter 7 will further detail the implementation tasks expected to undertake Program Strategy #6.

Program Strategy #7 – Expand Mandatory E-Waste Recycling Program

Goal: Educate residents of proper E-waste recycling programs.

An electronics voucher system was created and funded by NEWSNY to enable residents to take the item to a designated electronics recycler at no cost. The voucher program allowed the County to evaluate the need and success of the program. However since the New York State Electronic Equipment Recycling and Reuse Act was signed into law on May 28, 2010, the voucher system has been discontinued and e-waste is accepted free of charge to County residents at the Chemung Transfer Station on Lake Street in the City of Elmira. The law requires manufacturers to set up and fund programs for the collection and recycling of electronic waste in New York State. This relatively new law relieves New York local municipalities, such as Chemung County, of the costly burden of managing e-waste, and provides free and convenient recycling of electronics to consumers and businesses in New York State. Available e-waste collection sites, other than the Chemung Transfer Station, include:

- Best Buy – 950 County Road 64, Elmira
- Cyberdark Computing – 306 North Main Street, Elmira
- HEP Sales – 2400 Corning Road, Elmira
- PC Solutions & Consulting, LTD – 407 South Walnut Street, Elmira
- REACT E-Cycling, Inc. – 225 Colonial Drive, Horseheads
- Staples – 821 County Route 64, Big Flats
- The Salvation Army – 2502 Corning Road, Elmira
- Town of Horseheads – 150 Wygant Road, Horseheads
- Verizon Wireless Retail Store – 830 County Road 64, Elmira
- Volunteers of America – 700 Sullivan Street, Elmira

Education will also be a key component of the expansion of this program. The County will aim to educate residents on how and where they can dispose of electronics once they are past their useful life. Similar to the mercury collection program, the County will develop an inventory of drop-off locations for the proper disposal of e-wastes, which will be maintained and updated on the County's website.

The County's list of mandatory recycled items does not include computers, computer monitors, and televisions; however, the County does accept these materials for recycling. As the technology in consumer electronics evolves, the quantity of electronic waste, or E-waste, entering the waste stream will continue to grow. The County will evaluate expanding the list of mandatory recycled items to include E-wastes such as computers, computer monitors, televisions, cell phones and digital cameras. These materials are already prohibited from disposal per state law. This would require the adoption of a local law to include these items as mandatory recyclables.

Chapter 7 will further detail the subtasks necessary to expand the E-waste recycling program.

Program Strategy #8 – Pharmaceutical Education Program

Until recently, consumers have been told to flush unwanted drugs. With technological advances and research, low levels of drugs are being found in our surface waters. We know that some drugs pass largely unaltered through our wastewater treatment plants and enter rivers and other waters. Drugs from heath care facilities, pharmaceutical manufacturing facilities and farms can also find their way into the water.

Goal: Educate residents of proper pharmaceutical management to reduce the instances of improper disposal or flushing.

Chemung County Sheriff's Office participates in the Drug Enforcement Administration's nationwide Prescription Drug "Take Back" Initiative on an annual basis. Two events are scheduled each year with two collection sites available on those days. The County will post information on its website to ensure proper promotion of these events.

Chapter 7 will detail the implementation tasks necessary to educate the residents of Chemung County on the proper management of pharmaceuticals.

6.2 Program Strategies to Increase Organics Recovery

Interest in organic waste diversion has increased over the last few years, particularly because it has the potential to divert a significant portion of the waste stream away from landfills. The composting process can be applied to yard waste, food

waste, MSW, sewage sludge, non-hazardous industrial sludge, or some combination of these materials.

Program Strategy #9 – Support Yard Waste Composting Efforts

As discussed in Chapter 3, an intern from the Chemung County Soil & Water Conservation District prepared a report titled Yard Waste Management Infrastructure and Composting in Chemung, NY in August 2009 (Appendix C). This report provides valuable information related to the infrastructure currently available within the County, challenges municipalities are facing related to yard waste composting, and success stories provided by municipalities with strong yard waste programs within and outside the county's borders.

Chemung County encourages through educational outreach, as the first step in the hierarchy of yard waste management, that residents and businesses implement grass-cycling (leaving their grass clippings on the lawn), and/or backyard composting for yard waste management.

The Planning Unit's service area is both suburban and rural. Like other rural areas around the state and the country, residents tend to manage yard trimmings on their own property, which will be further discussed in Program Strategy #10.

Goal: Encourage yard waste composting to increase diversion of yard waste from the solid waste disposal stream.

Some municipalities within Chemung County provide for seasonal leaf and tree limb drop off locations, which were summarized in Table 3-3 in Chapter 3. Information regarding the municipalities' programs is still lacking and many programs can be enhanced; and therefore, the County will work to expand the information available through additional surveys and coordination with the municipalities during the planning period. In addition, Chemung County currently possesses a tub grinder that is available to its municipalities for implementation of municipally run composting programs. If they elect to participate in the program, municipalities are responsible for providing the labor and fuel for the machine. These fees are dedicated to a maintenance fund that ensures the grinder will be kept in good working condition. The scheduling for the use of the grinder is coordinated by the Soil & Water Conservation District, while its operation and maintenance is overseen by the County Highway Department.

The August 2009 report provided success stories from the Town of Southport, City of Elmira, and Town of Horseheads. During the planning period a plan for promoting and/or enhancing existing programs as well as the success stories will be generated so that residents and businesses utilize the various services available. Chemung County will support existing educational partners, such as Soil and Water

Conservation and Cornell Cooperative Extension, as well as potential new partners, to bolster yard waste composting education in the County. The implementation schedule in Chapter 7 provides a year by year breakdown of the different steps necessary to undertake this task.

Program Strategy #10 – Promote Backyard Composting through Education and Training Programs

While composting of all organic waste can be an effective method of low technology recycling that can significantly reduce the stream of waste destined for a disposal facility, collection of these materials on a household basis can prove both difficult and expensive. Another method for removal of these wastes from the disposal waste stream is to implement a backyard composting program, through which residents are provided information regarding the methods of backyard composting. It is anticipated that many residents are already participating in a backyard composting program of their own; however, this task would allow for the program to become more formalized and allow residents to share information amongst themselves.

Goal: Encourage backyard composting to divert more food and yard waste from the solid waste disposal stream.

Based on the estimates calculated for this plan, there is a potential to divert several thousand tons of organics from the MSW waste stream on an annual basis by increasing backyard composting efforts. With the implementation of this task primarily in Year 4 through Year 7, it is anticipated that the diversion rates will increase. Additionally, with the gathering of data proposed as part of this Plan, the diversion percentages are expected to increase based on better reporting. The implementation schedule in Chapter 7 provides an outline of this implementation task.

Program Strategy #11 – Management of Organics

<u>Management of Food Scraps</u>

There are no known food waste collection programs or multi-user composting facilities within Chemung County. Food waste collection programs are not currently monitored by Chemung County; however, a method for gathering this information is proposed as part of Program Strategy #16. Once an understanding of how food waste is processed or managed in Chemung County, then the next step would be to implement an educational program (Program Strategy #14) to disseminate information regarding the benefits of food waste collection or composting programs.

Goal: Increase diversion of food and yard waste requiring disposal, as well as increase diversion of biosolids.

According to the estimates derived from the NYSDEC's waste composition tool, food scraps comprise approximately 13% of the MSW stream in Chemung County. Many community organizations and institutions are taking the initiative to research options for the management of these materials. Currently, Chemung County does not have the resources available to conduct a food scraps program county-wide; however, the County is supportive of other organizations such as Elmira College, Cornell Cooperative Extension, and private entities implementing food scrap composting programs. However resources such as a recycling coordinator may become available for these types of programs to be initiated by the County as this Plan is implemented. The program has the potential to include improved data collection and reporting requirements, and providing a communication link between farmers and facilities such as hospitals, jails, schools, grocery stores, and restaurants.

At this time, Chemung County is not equipped to track institutional food waste generation or commercial food waste generation; however, this is expected to be improved as this Program Strategy is implemented. Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to implement this task.

Management of Biosolids/sewage sludge

As previously indicated in Table 2-1, municipal sewage sludge is generated at three (3) wastewater treatment plants in Chemung County. The management of these materials has been primarily handled at each facility with ultimate disposal at the Chemung County Landfill. There have been advancements in the composting of biosolids/sewage sludge in New York State over the last several years; however, these facilities have not explored these options.

According the NYSDEC Biosolids Management in NYS Report from June 2011, in 2009, beneficial use was the most popular biosolids management method used across New York State, on a dry weight basis. Beneficial use is considered direct land application, composting, chemical stabilization or heat drying. During the last 15 years, beneficial use had been consistently the most popular method with over 48 percent of biosolids generated being beneficially used. However, in 2010 there was a big change in the amount of beneficial use when several major beneficial use facilities switched to landfilling, due to costs and other issues. This change caused a significant drop in the quantity of biosolids being beneficially used and makes landfilling the most popular method in the State since July 1, 2010. Many municipalities that recently switched to landfilling are still considering beneficial use options as they evaluate their long-term management practices. For the near future, however, it is not certain that the beneficial use option will regain the popularity it has enjoyed for the past 15 years.

Although this change has occurred throughout NYS and the facilities in Chemung County are currently landfilling their biosolids/sewage sludge, Chemung County will continue to maintain communication with the wastewater treatment plants and evaluate if other management methods could be utilized in the future. Adjacent planning units such as, Tioga County, Tompkins County, and Steuben County have facilities that are beneficially using their biosolids through land application. Chemung County will encourage their wastewater treatment plant operators to inquire about the practices at these facilities and determine if a beneficial use management method would benefit the Chemung County wastewater treatment facilities. Chapter 7 – Implementation Schedule provides a timeline on when this evaluation would begin.

Program Strategy #12 – Monitor Management of Animal Mortalities

According to the Cornell Waste Management Institute (CWMI), over 25,000 dead deer carcasses are managed annually by the New York State Department of Transportation (NYSDOT). Disposal options are limited and appropriate disposal is expensive. Current NYSDOT practices include contracting with service providers to pick up and dispose of the animals, dragging animals further off the road or placing them in pits and depressions off side roads. These methods are becoming less acceptable as rural areas become more populated and there is increased concern for environmental quality.

Goal: Monitor success of CWMI and NYSDOT research methods for the management and composting of animal carcasses.

Chemung County currently does not have a compost management plan for road kill, slaughter waste or other non-farm related animal mortalities. CWMI has worked with the NYSDOT to research methods of management and composting of this type of material. The method of static pile carcass composting has shown some benefits. More examples of this type of management method need to be carried out before Chemung County would be in a position to consider instituting a county operated animal carcass composting program. However, Chemung County supports the efforts that CWMI and NYSDOT have made towards alternative methods of disposal for the dead carcasses, and will continue to monitor the progress being made. In addition, the Town of Horseheads collects carcasses from road kill and euthanized animals at the animal shelter. The carcasses are mixed with wood chips and composted; however, at this time the compost has no end market. Chemung County could be an advocate for municipalities sharing their experiences related to carcass composting. Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to evaluate this task.

Program Strategy #13 – Agricultural Plastics Program

About 25% of the total land area in Chemung County is active farmland. Land in farms has increased (per 2007 Census of Agriculture, Exhibit F) since 1997 partly due to the growth of small specialty farms such as sheep farms, meat goat operations, and organic farms[21]. The agricultural plastics that farmers use, such as plastic baling twine, greenhouse plastics, hay bale wraps, mulch film, and pesticide containers are not currently included in the list of acceptable recyclables items in Chemung County. As such, many of these materials end up in the County landfill or buried at their point of origin. One challenge to recycling these products is that many of them are bulky and difficult to transport, as well as the concern that many of them may be contaminated with pesticides, mold, and soil. Recently a handful of agricultural plastics recyclers have begun to emerge across the country, along with new concepts in the handling of these materials to enhance the ability to recycle them.

Goal: Support the current and potential expansion of the agricultural plastics recycling program through the Chemung County Soil & Water Conservation District.

The Chemung County Soil & Water Conservation District has begun a pilot program that allows a small number of farmers to bale their agricultural plastics in lieu of other disposal options. This program is currently constrained by the availability of markets interested in the baled commodity. In 2013 and 2014, 40 bales and 80 bales of agricultural plastics were sent out for recycling, respectively. The Soil & Water Conservation District will continue to work on establishing markets and looking for partnership opportunities with other planning units, so that the program may provide a regional benefit and commodity quantities that are desirable to the recycling markets. In addition, pesticide containers are collected from area farmers through the USAg Recycling program twice a year.

The County Division of Soil & Water will continue to look into expanding the agricultural plastics recycling program. The feasibility of larger scale use will be investigated and outside Planning Unit partners will be sought out to participate. Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to be completed to expand this program throughout the County.

[21] Agricultural Economic Development Plan (Agricultural and Farmland Protection Plan) prepared by Chemung County Agricultural and Farmland Protection Board, Cornell Cooperative Extension of Chemung County, Chemung County Planning Department. April 2011.

6.3 Public Education Elements

Chemung County has taken the initiative to promote recycling in schools through presentations and distribution of recycling information. If financial and personnel resources allow, the County will continue this program in the local schools, as well as expanding into public facilities (such as municipal office buildings) as referenced in Program Strategy #1.

Program Strategy #14 – Public Outreach and Education

Public outreach and education regarding waste diversion programs and responsible disposal of special wastes has been identified as a key component of the solid waste management program in Chemung County.

Goal: Educate residents to increase recycling and waste diversion and reduce improper disposal of materials.

Chemung County is dedicated to education and believes that this is best accomplished, and provides the greatest benefit, when practiced in partnership with the community, since impacts and benefits of management decisions reach across property boundaries. Waste streams that could experience higher diversion rates through further public education efforts have been identified. Specifically, the waste handling areas that should receive the most focus initially are:

- Recycling
- Yard Waste Composting Facilities
- Backyard Composting
- Food Scrap Composting at Institutions and/or Large Commercial Generators
- HHW Collection Events
- C&D Debris Diversion Opportunities
- Mercury Containing Materials Disposal Options
- E-waste Management Options
- Pharmaceuticals Management

Currently the County has a partnership with the Soil & Water Conservation District for educational outreach. The Soil & Water Conservation District is responsible for providing education at special events and schools related to waste reduction, reuse and recycling.

In addition, the County's agreement with NEWSNY (as discussed in Chapter 3) requires NEWSNY to establish a Zero Sort educational outreach program. The program is aimed at educating residents and commercials haulers regarding what commodities can be recycled through the County facilities and the process by which

these materials see new life. As part of the landfill expansion project, NEWSNY is also proposing an education center on 1.4-acres of property adjacent to the landfill property.

During this planning period, the County will evaluate its current and potential education methods for promoting the Chemung County Solid Waste Management District Separation and Segregation of Recyclables or Reusable Material Law (especially if the law is revised). The County will evaluate the feasibility of adding recycling education at public events, specifically in the areas where they can team with local companies and not for profit agencies to encourage the recycling of specific waste streams. To the extent that sufficient funds and resources are available, much of the education will be focused in local public schools as well as colleges and universities and public events, which were all previously listed in Chapter 1 – Tables 1-4 and 1-7. This will provide the most exposure to the maximum quantity of people for each effort. Later in the planning period, other groups such as, libraries (Table 1-5) and jails, institutions, nursing homes (Table 1-6) could be added to the outreach program. Additionally, the County and their partners will likely employ local media in an effort to promote specific collection and education events.

Providing information to these generators regarding options for implementing recycling programs, as well as providing resources for in-house training programs, may also offer a valuable method for increasing diversion rates in these types of facilities. Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to evaluate this task.

Program Strategy #15 – Green Business Recognition Program

Chemung County intends to support and recognize businesses that are doing the right thing related to waste reduction, reuse and recycling within the community. During the planning period, the County, with assistance from their partners, will evaluate the ability to reward businesses that demonstrate green practices, and the mechanisms by which they can effectuate such recognition. In tandem with this effort the County will look into the feasibility of offering incentives for green businesses to establish themselves within Chemung County. Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to evaluate this task.

Goal: Recognize businesses that are committed to increasing their waste diversion rates and working towards recovery goals

6.4 Infrastructure Needs

The County currently has the infrastructure that is needed to divert waste. However, the following programs will assist in diverting waste, which will lessen the strain put on the current infrastructure. This will benefit the solid waste management system in place as the County will not need to add to its current infrastructure during the planning period.

Program Strategy #16 - Improving Solid Waste and Recycling Data Compilation

The County has a recycling program, with many materials being mandatory to recycle. While the County offers recycling options, the Annual Solid Waste and Recyclables Inventory produced by the County consistently reports recycling percentages below the County's recycling goals set forth in the original plan. It is the County's belief that this is due to the fact that reported recycling numbers are based solely on the materials that are handled through the County's solid waste management system. Large recyclables producers such as big box stores, and even private recyclables collection companies, may ship recyclable products directly to the end user for a profit, bypassing the County recycling facilities. As a result, these materials are not being accounted for in the County's recycling reports.

Goal: To obtain a more complete data set to assist with the implementation of the program strategies.

The County will undertake several recycling data surveys over the course of the planning period, which will be distributed to various generators in the County in order to compile a more complete set of recycling data. These surveys will be used to help assess what materials could be available for use in new programs such as organics composting and C&D material recycling. The survey will most likely be conducted in stages, with the largest waste producers being contacted first. The groups of generators could include: (1) retail businesses (groceries, restaurants, stores); (2) industries; (3) schools and institutions; (4) libraries, jails and nursing homes; (5) the public sector and special events. Survey recipients would be asked for data such as: recyclable material (metals, plastic, and paper) produced per year, organic material produced per year, C&D material produced per year, and current disposal/recycling methods. Intermediate facilities such as confidential paper shredding services may also be contacted to determine how much material they receive from within Chemung County. This information will then be compiled to help the County more accurately determine the actual recycling rate within the County, which recycling efforts are most effective, and which new recycling methods would be most prudent for the County to pursue. If response rates are low, the County will consider enforcement of the hauler licensing and reporting component of the law to obtain better data.

In addition to generator data, solid waste management facility data will be collected as well. For every facility/program that manages MSW, biosolids/sewage sludge, C&D debris, processed scrap metal, and/or industrial waste generated in Chemung County, requested information would include information regarding:

- capacity/expected life,
- service areas, and
- operating status.

For Planning Unit owned facilities/programs information would include:

- infrastructure/components,
- age,
- operating dates,
- size,
- regulatory status,
- partnerships/ opportunities,
- contracts,
- improvements or changes, and
- resources/ needs/ costs.

Program Strategy #17 – Chemung County Solid Waste Management District Separation and Segregation of Recyclables or Reusable Material Law Revision

The County has identified areas in which its existing Separation and Segregation of Recyclables or Reusable Material Law can be strengthened in order to more adequately ensure that waste is disposed of or recycled according to plan. During the planning period, the County will conduct an internal review of its law, as well as consult with outside sources, in order to ensure its Separation and Segregation of Recyclables or Reusable Material Law is up-to-date. Specific items that the County intends to address include, but are not limited to:

- Update list of mandatory recyclables
- Recycling at multiple-resident dwellings
- Recycling at hotels and motels
- Commercial recycling
- Review and revise definitions
- Revise recordkeeping and reporting requirements for haulers and/or generators
- Review enforcement options

Goal: To review and modify the Separation and Segregation of Recyclables or Reusable Material Law

These items, among others, will be considered during the law review process and implemented as the County deems prudent.

Program Strategy #18 – Pay-As-You Throw Program

The County currently supports a pay-as-you-throw (PAYT) program at the Lake Street Transfer Station and other Drop-off Stations whereby residents pay for disposal of their solid waste at a per bag rate, while recyclables are received at no charge. Since Chemung County is not responsible for curbside collection of residential waste, the PAYT program would need to be implemented through the local haulers. Given that PAYT has been proven to be successful in many parts of the state including at the County's transfer stations, Chemung County will continue to monitor the availability and public need for this type of service. Should the public demand become greater than the private sector can manage, Chemung County will work with the haulers to determine if incentivized waste reduction programs can be made available to residents. Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to evaluate this task.

Goal: Evaluate the feasibility of PAYT programs during review/update of the Separation and Segregation of Recyclables or Reusable Material Law

6.5 Selection of an Integrated Solid Waste Management System

While many waste management options/goals were outlined in the program strategies above, including increased recycling and yard waste composting efforts and the implementation of organic waste composting pilot programs, some portion of the waste stream will remain in need of disposal. The practice of landfilling of these wastes has been, and will remain, a reliable, environmentally-sound means of disposal within the County. According to an aerial survey performed on September 23, 2014, the historical in-place waste density and the current permitted tonnage acceptance rate, it is anticipated that the current landfill will no longer have usable airspace for waste placement beyond 2015, without approval of a permit expansion. This means the landfill would be filled to its currently permitted disposal capacity during the proposed planning period. As outlined in the original LSWMP and in this LSWMP, the County's priorities for solid waste management are reduction, reuse, recycling and environmentally-sound disposal of remaining materials by maximizing the use and effectiveness of existing facilities within the County.

Program Strategy #19 – Continue Landfilling as Primary Disposal for all Non-Recyclable/Recoverable Waste

Continuing the use of the current landfill will provide a long-term source of revenue to the local economy and protect against the unreliability of transporting waste to other locations if the landfill were to close. There are few landfills located in the surrounding counties. The Chemung County Landfill services the majority of Chemung County and surrounding areas. Closing the landfill could subject residents throughout the region to increased waste disposal prices from associated transportation costs and the liability of transporting solid wastes to another landfill.

While prominent foci of this Plan is overall waste reduction and local recycling/reuse and composting programs, the region will still require a local, dependable facility for the disposal of all non-recyclable and non-hazardous waste. The proposed landfill expansion currently being contemplated will extend the life of the current landfill and provide economic and environmental security to the surrounding area in the form of preserving existing jobs, affordable waste disposal, maintenance of a local economy income, and built-in environmental safeguards. In addition, the increased permitted disposal capacity will provide the opportunity for disposal of waste from a larger area of surrounding communities, ensuring their access to affordable waste disposal. The increase in tonnage accepted at the landfill will also provide additional revenue to the County and the Town of Chemung to provide further tax relief to the residents as well as help to fund the implementation of the Plan. The County will continue to study and assess improvements to existing disposal methods and new disposal methods through emerging technologies over the course of the planning period.

Chapter 7 – Implementation Schedule

While some of the program enhancements outlined above are already in the planning stages, some will require a higher level of feasibility analysis, funding, and planning before implementation. The preliminary implementation schedule for the plan is outlined in the table below. As pursuit of implementing these proposed enhancements continues, and further information is gathered regarding the feasibility of implementing these programs, this schedule will be updated as needed via the biennial LSWMP Compliance Reports, which are planned to be issued by the County every 2 years per NYSDEC requirements.

Chemung County - Implementation Schedule

Program Strategy	Year									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	1	2	3	4	5	6	7	8	9	10
1) Increase Recycling at County Facilities	Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator. Define a waste diversion goal for county owned facilities.	Prepare a plan to increase recycling rates at County-owned facilities. Evaluate current recycling procedures at County owned facilities.	Preliminarily quantify recycling diversion rates at facilities. Encourage "Green Teams" within county offices to support additional recycling opportunities at county facilities.	Draft a model resolution that can be used by municipalities within the County to encourage a similar program for increasing recycling efforts on the local level.	Initiate internal recycling campaign. Coordinate with other municipalities to share ideas to promote recycling. Implement a recycling campaign through signage, email notifications, contests, etc.			Review expanding the recycling campaign to include public events, schools, institutions, etc.		Update tasks for new 10 year planning period depending on progress.
2) Increase Construction and Demolition Debris Recycling		Gather data related to C&D debris generation and diversion from Program Strategy #16 (data gathering).			Establish a C&D waste diversion and recycling goal. Initially focus on County funded projects.	Identify other municipalities with C&D recycling programs, and determine if the programs could be adapted to Chemung County's needs. Through economic development opportunities explore the siting of a C&D debris processing facility.	If determined to be feasible, the County could prepare a plan that lays out how the program would be structured including: implementation, education, tracking, documentation, etc.	Monitor and assess opportunities for meeting or increasing the goal.	Monitor and assess opportunities for meeting or increasing the goal.	Determine next step for C&D Debris Recycling.

Chemung County - Implementation Schedule

Program Strategy	Year									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	1	2	3	4	5	6	7	8	9	10
3) Product Reuse Collection and Distribution Programs	Inventory existing product reuse programs.	Prepare and distribute biennial recycling survey, including survey of interest in product reuse or exchange. Include an item on the waste generator surveys related to materials that may be useful to others and whether the business would be interested or willing to exchange those materials.	Disseminate information to those interested in Product Reuse based on results of the survey.	Prepare and distribute biennial recycling survey, including survey of interest in product reuse or exchange. Include an item on the waste generator surveys related to materials that may be useful to others and whether the business would be interested or willing to exchange those materials.	Provide avenues for businesses to communicate related to possible exchange of materials versus the alternative of disposing of them.	Assess the feasibility of providing a materials exchange program for Chemung County residents.	Disseminate information. If sufficient funds and resources are available, the County's educational program could include educating businesses about material exchange opportunities.	Prepare and distribute biennial recycling survey, including survey of interest in product reuse or exchange. Include an item on the waste generator surveys related to materials that may be useful to others and whether the business would be interested or willing to exchange those materials.	Provide avenues for businesses to communicate related to possible exchange of materials versus the alternative of disposing of them.	Provide avenues for businesses to communicate related to possible exchange of materials versus the alternative of disposing of them.
	Support existing product reuse operations and encourage additional product reuse facilities through economic development.									
4) Support Product Stewardship Framework					Reach out to the New York Product Stewardship Council to learn more about Product Stewardship and Extended Producer Responsibility (EPR). Educate county staff and County Legislature of benefits to supporting the product stewardship initiative.	Review other NY communities that have passed a Product Stewardship resolution showing their support. Determine if passing a similar resolution in Chemung County would be beneficial. Work with the NY Product Stewardship Council to draft a resolution that would fit the needs of Chemung County.	If supported by the Legislature, pass a Product Stewardship resolution.	Support the NY Product Stewardship Council and remain educated on product stewardship initiatives.		Update tasks for new 10 year planning period depending on progress.

Chemung County - Implementation Schedule

Program Strategy	Year									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	1	2	3	4	5	6	7	8	9	10
5) HHW Collection Opportunities	Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.		Determine if additional HHW collection events are necessary or a permanent facility is needed. Would implement to the extent sufficient funding and resources are available.		Identify areas for potential improvement and make HHW program changes as appropriate .		Determine tasks for remainder of the planning period depending on progress.	Update and modify the Plan to reflect successes and challenges.	Update and modify the Plan to reflect successes and challenges.	Update and modify the Plan to reflect successes and challenges.
	With the assistance of NEWSNY and Cornell Cooperative Extension, continue providing two (2) HHW Collection Events per year within Chemung County. To the extent sufficient funding and resources are available and the service is needed, add additional collection events in Chemung County.									
6) Expand Mercury Collection Program	Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Inventory existing mercury collection programs (public and private) within ChemungCounty. Post drop-off locations on the County's website.	Promote existing drop-off locations and continue to update County's website.	Promote existing drop-off locations and continue to update County's website.	Promote existing drop-off locations and continue to update County's website.	Promote existing drop-off locations and continue to update County's website.	Promote existing drop-off locations and continue to update County's website.	Promote existing drop-off locations and continue to update County's website.	Promote existing drop-off locations and continue to update County's website.	Promote existing drop-off locations and continue to update County's website.
	Continue providing two (2) HHW Collection Events per year within Chemung County where mercury containing materials will be accepted.									
7) Expand Mandatory E-Waste Recycling Program	Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Inventory existing e-waste collection events (public and private) within Chemung County. Post events on the County's website. Generate a public education program to educate residents and legislators of the importance of recycling electronics properly.	Promote existing collection events and continue to update County's website.							
	Participate or designate a reprentative to track possible modifications to state legislation related to the E-Waste Law and their implications to the County and their residents or businesses.									

Chemung County - Implementation Schedule

Program Strategy	Year									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	1	2	3	4	5	6	7	8	9	10
8) Pharmaceutical Education Program	Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Undertake a promotional campaign to educate residents of the proper management of pharmaceuticals. Work with the County's Soil & Water Conservation District and/or the Chemung County Sheriff's Office to develop educational materials to educate Chemung County residents. Other consumer education materials are available from SMARxT Disposal Program, developed by a partnership of the American Pharmacists Association, US Department of Fish and Wildlife, American College of Emergency Physicians, National Association of Chain Drug Stores, Consumer Healthcare Products Association, PhRMA, and Partnership for a Drug-Free America.				Continue to promote proper management of pharmaceuticals via Chemung County's website.	Continue to promote proper management of pharmaceuticals via Chemung County's website.	Continue to promote proper management of pharmaceuticals via Chemung County's website.	Continue to promote proper management of pharmaceuticals via Chemung County's website.	Continue to promote proper management of pharmaceuticals via Chemung County's website.
9) Support Yard Waste Composting Efforts	Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator. Set diversion goals as a method of tracking the success of the program.	Update the 2009 inventory of existing yard waste and organics management programs (public and private) within Chemung County.	Expand the inventory to include programs outside of Chemung County that could be used as models. Determine if such programs would be successful in Chemung County.	Encourage and promote private compost operations through economic development. Maintain communication with municipalities and educational partners related to existing or ongoing yard waste composting education programs.		Use input from local municipalities and other counties with similar programs to determine type of program that would be feasible.		Review diversion goals to ensure they are in line with the programs in place.	Update and modify the Plan to reflect successes and challenges.	Update tasks for new 10 year planning period depending on progress.
	Promote existing yard waste compost programs that are available to Chemung County residents.									
10) Promote Backyard Composting through Education and Training Programs	Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Survey existing backyard composting programs (public and private) within NYS to understand obstacles, strategies for overcoming those obstacles, and successes.		Identify training materials available on the NYSDEC and Cornell Cooperative Extension websites for assistance in developing training courses or locating backyard composting demonstration sites. Place links on Chemung County's website for these training course materials.		Enhance backyard composting by developing or maintaining partnerships with outside organizations (Soil and Water Conservation District, Cornell Cooperative Extension) and by providing (or funding) backyard demonstration sites or educational events.		Update and modify the Plan to reflect successes and challenges.	Update tasks for remainder of the planning period depending on progress.	Update tasks for new 10 year planning period depending on progress.
						Monitor backyard composting demonstration site(s) for successes and failures.				

Chemung County - Implementation Schedule

<table>
<tr><th rowspan="3">Program Strategy</th><th colspan="10">Year</th></tr>
<tr><th>2016</th><th>2017</th><th>2018</th><th>2019</th><th>2020</th><th>2021</th><th>2022</th><th>2023</th><th>2024</th><th>2025</th></tr>
<tr><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th></tr>
<tr><td rowspan="2">11) Support Organics Management</td><td colspan="10">Educate municipalities about the availability of the County's tub grinder. Work with the Soil & Water Conservation District to promote the use of the tub grinder.</td></tr>
<tr><td>Inventory existing yard waste and organics management programs (public and private) within Chemung County. Determine which programs require support or have successes to share.</td><td colspan="2">Approach organics management programs requiring support or expansion and provide necessary opportunities or access to successful programs. Encourage local programs to share their successes with others and promote the successful programs via Chemung County's website.</td><td colspan="2">Investigate potential partnerships or similar programs with other organizations such as Soil & Water Conservation District, Cooperative Extension, farms, and agricultural organizations.</td><td>Determine level of involvement required from County or continue as a source to share information among generators.</td><td>Inventory large commercial and institutional generators within Chemung County and determine what organics management programs are underway or if they require assistance to further advance their programs. If deemed appropriate, partners could lead this effort and work with the commercial or institutional generators to advance their programs.</td><td>Continue working with commercial and institutional generators. Determine what level of involvment the County should maintain or continue as a source to share information among generators.</td><td colspan="2">Continue to be advised of organics management programs within Chemung County and provide any additional future support as deemed necessary.</td></tr>
<tr><td>Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.</td><td>Inventory biosolids management activities within Chemung County and determine interest in alternative programs such as composting or beneficial use programs.</td><td>Identify models for successful organics management outside Chemung County, assess the key drivers of success, and develop a plan to apply them locally.</td><td colspan="3"></td><td colspan="4"></td></tr>
<tr><td>12) Monitor Management of Animal Mortalities</td><td>Monitor progress of CWMI and NYSDOT regarding animal mortality and composting. Discuss the challenges faced by the Town of Horseheads with composting animal carcasses.</td><td>Report in the Biennial Compliance report any new developments in animal carcass composting activities.</td><td>Monitor progress of CWMI and NYSDOT regarding animal mortality and composting.</td><td>Report in the Biennial Compliance report any new developments in animal carcass composting activities.</td><td>Monitor progress of CWMI and NYSDOT regarding animal mortality and composting.</td><td>Report in the Biennial Compliance report any new developments in animal carcass composting activities.</td><td>Monitor progress of CWMI and NYSDOT regarding animal mortality and composting.</td><td>Report in the Biennial Compliance report any new developments in animal carcass composting activities.</td><td>Monitor progress of CWMI and NYSDOT regarding animal mortality and composting.</td><td>Report in the Biennial Compliance report any new developments in animal carcass composting activities.</td></tr>
<tr><td>13) Agricultural Plastics Program</td><td>Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.</td><td colspan="2">Monitor the progress of the County's Soil and Water Conservation District's pilot agricultural plastics program, as well as the availability of the USAg Recycling program. Promote the availability of these programs on the County's website.</td><td colspan="3">Identify avenues for County to share successes with the Ag community. Determine if the County and/or their partners could provide more support to the Ag community through hosting recycling events.</td><td colspan="3">Support and promote a county-wide agricultural plastics recycling event, if deemed appropriate.</td><td>Update tasks for new 10 year planning period depending on progress.</td></tr>
</table>

Chemung County - Implementation Schedule

Program Strategy	Year									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	1	2	3	4	5	6	7	8	9	10
14) Encourage Public Outreach and Education Program	Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Work with NEWSNY and the Soil & Water Conservation District to draft a preliminary education plan regarding waste diversion and responsible waste disposal. Focus initial plan on recycling, yard waste composting, backyard composting, food waste composting, HHW collection opportunities, C&D debris diversion, mercury containing materials disposal options, e-waste management, and pharmaceutical management options. The plan should expect the initial audience to include: residents, local public schools as well as colleges and universities, and attendees at public events.		Maintain the partnership with NEWSNY and the Soil & Water Conservatoin District to implement the public outreach and education plan.	Assess the effectiveness of the education plan and make necessary alterations.	Expand the education plan to include other groups, such as, municipalities, libraries, jails, institutions, and nursing homes. Add details related to product reuse and organics management to the education plan that would be most beneficial for these additional audience members.		Expand the education plan to include other groups, such as, commercial retail stores and industries. Add details related to product stewardship or extended producer responsibility, waste prevention, waste diversions, and organics management to the education plan that would be most beneficial for commercial and industry audiences.		Update tasks for new 10 year planning period depending on progress.
15) Green Business Recognition Program	Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Coordinate with NEWSNY and/or the Soil and Water Conservation District to develop an outline for a green business recognition program. The program may also include the development of a subcommittee to develop guidance, review criteria, and type of recognition. Engage Chemung County Chamber of Commerce in the development process.		Together with the Chemung Chamber of Commerce, promote this green business recognition program. Issue the application and present the award at the Chamber's Annual Meeting or other established awards event. The Recognition Program subcommittee should gather feedback on the success of the program.		Determine path forward for this program. Will it be an annual award or less frequently. Does the community support this program and want to see more. Proceed with the second round of applications.	Continue awards program development. Update and modify the Plan to reflect successes and challenges.			Update tasks for new 10 year planning period depending on progress.

Chemung County - Implementation Schedule

Program Strategy	Year									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	1	2	3	4	5	6	7	8	9	10
16) Improving Solid Waste & Recycling Data Compilation	Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Prepare a survey template for distribution to waste generators. Determine quantities of "heads" for each generator type listed in Chapter 1 - Tables 1-4 & 1-6 (i.e., number of beds in hospitals, number of students in each school, etc.)	Prepare and distribute surveys to retail businesses (groceries, restaurants, stores).	Report survey results and recommendationss. Utilize to implement other tasks or modify tasks. Follow up with interested generators to improve their waste diversion programs.	Prepare and distribute surveys to industries and agricultural facilities.	Report survey results and recommendations. Utilize to implement other tasks or modify tasks. Follow up with interested generators to improve their waste diversion programs.	Prepare and distribute surveys to schools and institutions.	Report survey results and recommendations. Utilize to implement other tasks or modify tasks. Follow up with interested generators to improve their waste diversion programs.	Prepare and distribute surveys to libraries, jails, nursing homes, and the public sector (municipalities).	Report survey results and recommendations. Utilize to implement other tasks or modify tasks. Follow up with interested generators to improve their waste diversion programs.
				Following the revisions to the Separation and Segregation of Recyclables or Reusable Material Law, if deemed appropriate, incorporate the aspects in the law related to reporting into the data compilation program strategy.						
		Prepare a survey template for distribution to facilities or haulers that manage MSW, biosolids, C&D, processed scrap metal, and industrial waste.	Prepare and distribute surveys.	Report survey results and recommendations. Utilize to implement other tasks or modify tasks.	Prepare and distribute surveys.	Report survey results and recommendations. Utilize to implement other tasks or modify tasks.	Prepare and distribute surveys.	Report survey results and recommendations. Utilize to implement other tasks or modify tasks.	Prepare and distribute surveys.	Report survey results and recommendations. Utilize to implement other tasks or modify tasks.
17) Recyclables or Reusable Material Law Revision	Conduct internal review of Separation and Segregation of Recyclables or Reusable Material Law. Consult with outside sources to ensure that law is up-to-date and determine any necessary revisions to be made.		Update Separation and Segregation of Recyclables or Reusable Material Law.	Monitor and gather data related to modification of Separation and Segregation of Recyclables or Reusable Material Law.						
18) Pay-As-You Throw Program		Monitor PAYT interest and availability through biennial surveys.	Evaluate the need to promote PAYT programs to customers.	Continue to monitor through biennial surveys regarding the possibility of implementing mandatory PAYT options from haulers.	Evaluate the need to promote PAYT programs to customers.	If warranted, work with local haulers and transfer stations to promote PAYT programs to customers.	Conduct PAYT survey to local haulers, transfer station operators, and possibly residents to determine successes and challenges of a PAYT program.	Evaluate the need to promote PAYT programs to customers.	Update tasks for new 10 year planning period depending on progress.	

Chemung County - Implementation Schedule

Program Strategy	Year									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	1	2	3	4	5	6	7	8	9	10
19) Continue Landfilling as Primary Disposal for all Non-Recyclable/ Recoverable Waste	Receive landfill expansion permit, which will provide disposal capacity through the remainder of this planning period.	Review alternative waste disposal technologies and explore feasibility of implementation, provided resources are available.		Review alternative waste disposal technologies and explore feasibility of implementation, provided resources are available.		Review alternative waste disposal technologies and explore feasibility of implementation, provided resources are available.		Review alternative waste disposal technologies and explore feasibility of implementation, provided resources are available.		Review alternative waste disposal technologies and explore feasibility of implementation, provided resources are available.
	Implement an additional landfill gas to energy project.			Monitor gas generation potential at the landfill annually to determine the need for additional gas utilization projects.						
	Annually monitor available landfill capacity and pursue expansion options as necessary to maintain long-term disposal capacity as long as technically feasible and cost-effective. Continue to assess existing and new disposal methods.									
Optimal MSW Recycling Diversion Goals	16%	21%	26%	31%	36%	41%	46%	50%	55%	60%
Optimal C&D Diversion Goals	33%	50%	50%	52%	58%	58%	58%	60%	62%	63%

Notes:

1. The above implementation schedule includes tasks and subtasks. Details related to required resources to achieve the projected results can be found in each implementation task description in Chapter 6. The bulk of the tasks are expected to be undertaken in the earlier years of the planning period, and more detail will be added through compliance reports for all impending tasks as the planning period progresses.

2. It should be understood that these recycling diversion projections are intended for use as a planning tool only and as such are not a commitment of achievement by the County. As programs progress and new information becomes available, these projections are expected to evolve and require revision over time. Accordingly, to remain a valuable planning tool, it is expected these optimal rate projections will be updated or revised in each biennial compliance report along with the implementation schedule, as necessary.

Chapter 8 – State Environmental Quality Review (SEQR) Determination

A SEQRA review for the LSWMP was undertaken prior to the adoption of the final plan at the July 14, 2015 meeting of the County Legislature. All required SEQRA documents will be maintained in a file at the County Office Building as well as in Appendix F of this plan.

Chapter 9 – Public Participation/Notification to Neighboring Jurisdictions

Between May 1, 2015 and June 15, 2015 the County held an open public comment period on the draft plan, during which, a public information meeting was held on May 12, 2015. Minimal comments were received; however, of the comments received that were related to the content of the LSWMP, the County addressed the public's concerns. In addition, all neighboring counties were notified about the draft LSWMP's availability, and it was posted on the county website for review.

Chapter 10 – Plans for LSWMP Distribution

The County provided public notice regarding the completion of the Draft LSWMP on the county website. The website posting indicated that the plan could be viewed through the county website and that hard copies were available for public review at the Legislative Chambers during business hours. Public comments are included in Appendix G.

Each neighboring county was notified in writing of the completion of the plan and its availability for review.

Chapter 11 – Resolution Adopting the LSWMP

The Chemung County Legislature enacted a resolution adopting the Final Solid Waste Management Plan at its July 14, 2015 meeting, and a copy of the resolution is included in Appendix H.

Appendix A

Detailed Waste Composition Spreadsheets

A1 – MSW Composition Table
A2 – MSW Diversion Table
A3 – C&D Composition Table
A4 – C&D Diversion Table

A1 – MSW Composition Table

Chemung County

Municipal Solid Waste (MSW) Detailed Composition Analysis Year 2010

Material	MSW GENERATED									
	Rural			Suburban			Urban			Planning Unit/ Municipality Percentages
	34.53%			65.47%			0.00%			
	Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined	
	58.00%	42.00%	100.00%	55.00%	45.00%	100.00%	52.00%	48.00%	100.00%	100.00%
Newspaper	**5.20%**	**1.90%**	**3.81%**	**5.00%**	**1.90%**	**3.61%**	**6.60%**	**2.00%**	**4.39%**	**3.68%**
Corrugated Cardboard	**6.60%**	**13.90%**	**9.67%**	**6.60%**	**13.90%**	**9.89%**	**6.90%**	**13.70%**	**10.16%**	**9.81%**
Other Recyclable Paper										
Paperboard	3.20%	1.10%	2.32%	3.30%	1.00%	2.27%	3.60%	0.90%	2.30%	2.28%
Office Paper	0.80%	3.80%	2.06%	0.90%	4.20%	2.39%	1.10%	5.80%	3.36%	2.27%
Junk Mail	3.00%	0.70%	2.03%	3.20%	0.70%	2.08%	3.50%	0.70%	2.16%	2.06%
Other Commercial Printing	1.70%	2.30%	1.95%	1.70%	2.40%	2.02%	2.30%	2.60%	2.44%	1.99%
Magazines	1.10%	0.90%	1.02%	1.00%	0.80%	0.91%	1.10%	1.00%	1.05%	0.95%
Books	0.50%	0.30%	0.42%	0.50%	0.30%	0.41%	0.60%	0.40%	0.50%	0.41%
Bags	0.50%	0.20%	0.37%	0.50%	0.20%	0.37%	0.60%	0.20%	0.41%	0.37%
Phone Books	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.20%	0.25%	0.30%
Poly-Coated	0.20%	0.30%	0.24%	0.20%	0.20%	0.20%	0.30%	0.20%	0.25%	0.21%
Other Recyclable Paper (Total)	**11.30%**	**9.90%**	**10.71%**	**11.60%**	**10.10%**	**10.93%**	**13.40%**	**12.00%**	**12.73%**	**10.85%**
Other Compostable Paper	**6.80%**	**6.80%**	**6.80%**	**6.40%**	**6.40%**	**6.40%**	**6.80%**	**6.80%**	**6.80%**	**6.54%**
Total Paper	***29.90%***	***32.50%***	***30.99%***	***29.60%***	***32.30%***	***30.82%***	***33.70%***	***34.50%***	***34.08%***	***30.88%***
Ferrous/Aluminum Containers										
Ferrous Containers	1.90%	1.00%	1.52%	1.20%	0.70%	0.98%	1.40%	0.70%	1.06%	1.16%
Aluminum Containers	0.70%	0.40%	0.57%	0.60%	0.30%	0.47%	0.50%	0.40%	0.45%	0.50%
Ferrous/Aluminum Containers (Total)	**2.60%**	**1.40%**	**2.10%**	**1.80%**	**1.00%**	**1.44%**	**1.90%**	**1.10%**	**1.52%**	**1.67%**
Other Ferrous Metals	**5.20%**	**5.40%**	**5.28%**	**5.00%**	**5.80%**	**5.36%**	**3.30%**	**3.70%**	**3.49%**	**5.33%**
Other Non-Ferrous Metals										
Other aluminum	0.20%	0.30%	0.24%	0.20%	0.30%	0.25%	0.20%	0.30%	0.25%	0.24%
Automotive batteries	0.80%	0.50%	0.67%	0.70%	0.40%	0.57%	0.20%	0.20%	0.20%	0.60%
Other non-aluminum	0.50%	0.30%	0.42%	0.30%	0.40%	0.35%	0.40%	0.20%	0.30%	0.37%
Other Non-Ferrous Metals (Total)	**1.50%**	**1.10%**	**1.33%**	**1.20%**	**1.10%**	**1.16%**	**0.80%**	**0.70%**	**0.75%**	**1.22%**
Total Metals	***9.30%***	***7.90%***	***8.71%***	***8.00%***	***7.90%***	***7.96%***	***6.00%***	***5.50%***	***5.76%***	***8.22%***
PET Containers	**1.10%**	**0.80%**	**0.97%**	**0.90%**	**0.80%**	**0.86%**	**1.20%**	**1.00%**	**1.10%**	**0.90%**
HDPE Containers	**1.10%**	**0.60%**	**0.89%**	**0.90%**	**0.70%**	**0.81%**	**1.00%**	**0.70%**	**0.86%**	**0.84%**
Other Plastic (3-7) Containers	**0.20%**	**0.10%**	**0.16%**	**0.20%**	**0.20%**	**0.20%**	**0.20%**	**0.20%**	**0.20%**	**0.19%**
Film Plastic	**5.70%**	**5.90%**	**5.78%**	**5.50%**	**5.80%**	**5.64%**	**5.80%**	**5.80%**	**5.80%**	**5.69%**

Chemung County

Municipal Solid Waste (MSW) Detailed Composition Analysis Year 2010

Material	MSW GENERATED									
	Rural			Suburban			Urban			Planning Unit/ Municipality Percentages
	34.53%			65.47%			0.00%			
	Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined	
	58.00%	42.00%	100.00%	55.00%	45.00%	100.00%	52.00%	48.00%	100.00%	100.00%
Other Plastic										
Durables	3.10%	3.20%	3.14%	3.00%	3.20%	3.09%	3.20%	3.30%	3.25%	3.11%
Non-Durables	1.60%	1.80%	1.68%	1.60%	1.80%	1.69%	1.80%	1.90%	1.85%	1.69%
Packaging	1.40%	1.10%	1.27%	1.40%	1.10%	1.27%	1.50%	1.10%	1.31%	1.27%
Other Plastic (Total)	**6.10%**	**6.10%**	**6.10%**	**6.00%**	**6.10%**	**6.05%**	**6.50%**	**6.30%**	**6.40%**	**6.06%**
Total Plastics	***14.20%***	***13.50%***	***13.91%***	***13.50%***	***13.60%***	***13.55%***	***14.70%***	***14.00%***	***14.36%***	***13.67%***
Glass Containers	**4.10%**	**3.80%**	**3.97%**	**3.90%**	**3.80%**	**3.86%**	**4.30%**	**3.80%**	**4.06%**	**3.90%**
Other Glass	**0.50%**	**0.40%**	**0.46%**	**0.30%**	**0.40%**	**0.35%**	**0.40%**	**0.40%**	**0.40%**	**0.38%**
Total Glass	***4.60%***	***4.20%***	***4.43%***	***4.20%***	***4.20%***	***4.20%***	***4.70%***	***4.20%***	***4.46%***	***4.28%***
Food Scraps	**12.70%**	**13.30%**	**12.95%**	**12.90%**	**15.50%**	**14.07%**	**17.20%**	**25.20%**	**21.04%**	**13.68%**
Yard Trimmings	**3.10%**	**1.10%**	**2.26%**	**11.30%**	**9.10%**	**10.31%**	**4.20%**	**1.50%**	**2.90%**	**7.53%**
Total Organics	***15.80%***	***14.40%***	***15.21%***	***24.20%***	***24.60%***	***24.38%***	***21.40%***	***26.70%***	***23.94%***	***21.21%***
Clothing Footwear, Towels, Sheets	4.60%	3.00%	3.93%	4.40%	3.20%	3.86%	4.80%	2.50%	3.70%	3.88%
Carpet	1.40%	1.30%	1.36%	1.70%	1.40%	1.57%	1.70%	0.90%	1.32%	1.49%
Total Textiles	***6.00%***	***4.30%***	***5.29%***	***6.10%***	***4.60%***	***5.43%***	***6.50%***	***3.40%***	***5.01%***	***5.38%***
Total Wood	***4.10%***	***9.00%***	***6.16%***	***2.90%***	***4.10%***	***3.44%***	***2.00%***	***3.50%***	***2.72%***	***4.38%***
C&D Materials	8.00%	7.60%	7.83%	3.80%	2.70%	3.31%	4.40%	3.80%	4.11%	4.87%
Other Durables	1.90%	1.70%	1.82%	1.60%	1.50%	1.56%	1.90%	1.50%	1.71%	1.65%
Diapers	1.90%	1.10%	1.56%	2.10%	1.20%	1.70%	2.30%	1.10%	1.72%	1.65%
Electronics	1.30%	1.40%	1.34%	1.60%	1.70%	1.65%	1.30%	1.30%	1.30%	1.54%
Tires	1.80%	1.80%	1.80%	1.70%	1.40%	1.57%	0.50%	0.40%	0.45%	1.65%
HHW	0.60%	0.00%	0.35%	0.60%	0.00%	0.33%	0.50%	0.00%	0.26%	0.34%
Fines	0.60%	0.60%	0.60%	0.10%	0.20%	0.15%	0.10%	0.10%	0.10%	0.30%
Total Miscellaneous	***16.10%***	***14.20%***	***15.30%***	***11.50%***	***8.70%***	***10.24%***	***11.00%***	***8.20%***	***9.66%***	***11.99%***
Total	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**

A2 – MSW Diversion Table

Chemung County

Municipal Solid Waste (MSW) Combined Composition Analysis and Projections

Material	Tons Generated	% of Total	2010		2016		2017		2018		2019		2020		2021		2022		2023		2024		2025	
			Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted
																								25.0%
Newspaper	2,857	3.68%	2,032	71.12%	2,058	72.01%	2,083	72.90%	2,108	73.78%	2,134	74.67%	2,159	75.56%	2,185	76.45%	2,210	77.34%	2,235	78.22%	2,261	79.11%	2,286	80.00%
Corrugated Cardboard	7,623	9.81%	2,558	33.56%	2,912	38.21%	3,266	42.85%	3,620	47.49%	3,974	52.14%	4,328	56.78%	4,682	61.43%	5,036	66.07%	5,390	70.71%	5,744	75.36%	6,098	80.00%
Other Recyclable Paper																								
Paperboard	1,774	2.28%	657	37.04%	716	40.34%	774	43.63%	833	46.93%	891	50.23%	950	53.52%	1,008	56.82%	1,067	60.11%	1,125	63.41%	1,184	66.70%	1,242	70.00%
Office Paper	1,766	2.27%	631	35.74%	709	40.17%	788	44.60%	866	49.02%	944	53.45%	1,022	57.87%	1,100	62.30%	1,178	66.72%	1,257	71.15%	1,335	75.57%	1,413	80.00%
Junk Mail	1,601	2.06%	493	30.78%	556	34.70%	619	38.62%	681	42.55%	744	46.47%	807	50.39%	870	54.31%	933	58.23%	995	62.16%	1,058	66.08%	1,121	70.00%
Other Commercial Printing	1,549	1.99%	458	29.59%	513	33.13%	568	36.67%	623	40.21%	678	43.75%	733	47.30%	787	50.84%	842	54.38%	897	57.92%	952	61.46%	1,007	65.00%
Magazines	736	0.95%	303	41.15%	328	44.53%	352	47.92%	377	51.30%	402	54.69%	427	58.07%	452	61.46%	477	64.84%	502	68.23%	527	71.61%	552	75.00%
Books	320	0.41%	9	2.70%	30	9.43%	52	16.16%	73	22.89%	95	29.62%	116	36.35%	138	43.08%	160	49.81%	181	56.54%	203	63.27%	224	70.00%
Bags	286	0.37%	9	3.02%	26	9.22%	44	15.42%	62	21.62%	80	27.81%	97	34.01%	115	40.21%	133	46.41%	150	52.60%	168	58.80%	186	65.00%
Phone Books	233	0.30%	43	18.55%	56	24.19%	70	29.84%	83	35.48%	96	41.13%	109	46.77%	122	52.42%	135	58.06%	149	63.71%	162	69.35%	175	75.00%
Poly-Coated	167	0.21%	35	20.75%	39	23.68%	44	26.60%	49	29.53%	54	32.45%	59	35.38%	64	38.30%	69	41.23%	74	44.15%	78	47.08%	83	50.00%
Other Recyclable Paper (Total)	8,433	10.85%	2,638	31.28%	2,974	35.27%	3,311	39.26%	3,647	43.25%	3,984	47.24%	4,320	51.23%	4,657	55.22%	4,993	59.21%	5,330	63.20%	5,666	67.19%	6,003	71.19%
Other Compostable Paper	5,081	6.54%	0	0.00%	152	3.00%	305	6.00%	457	9.00%	610	12.00%	762	15.00%	915	18.00%	1,067	21.00%	1,219	24.00%	1,372	27.00%	1,524	30.00%
Total Paper	23,994	30.88%	7,228	30.13%	8,097	33.75%	8,965	37.36%	9,833	40.98%	10,702	44.60%	11,570	48.22%	12,438	51.84%	13,306	55.46%	14,175	59.08%	15,043	62.70%	15,911	66.31%
Ferrous/Aluminum Containers																								
Ferrous Containers	904	1.16%	208	22.95%	250	27.65%	293	32.36%	335	37.06%	378	41.77%	420	46.47%	463	51.18%	505	55.88%	548	60.59%	591	65.29%	633	70.00%
Aluminum Containers	391	0.50%	26	6.64%	53	13.48%	79	20.31%	106	27.15%	133	33.99%	159	40.82%	186	47.66%	213	54.49%	240	61.33%	266	68.16%	293	75.00%
Ferrous/Aluminum Containers (Total)	1,295	1.67%	233	18.03%	303	23.38%	372	28.73%	441	34.07%	511	39.42%	580	44.77%	649	50.12%	718	55.46%	788	60.81%	857	66.16%	926	71.51%
Other Ferrous Metals	4,145	5.33%	86	2.09%	368	8.88%	649	15.67%	931	22.46%	1,212	29.25%	1,494	36.04%	1,775	42.83%	2,057	49.63%	2,338	56.42%	2,620	63.21%	2,901	70.00%
Other Non-Ferrous Metals																								
Other aluminum	190	0.24%	9	4.56%	17	9.11%	26	13.65%	34	18.19%	43	22.74%	52	27.28%	60	31.82%	69	36.37%	78	40.91%	86	45.46%	95	50.00%
Automotive batteries	468	0.60%	0	0.00%	44	9.50%	89	19.00%	133	28.50%	178	38.00%	222	47.50%	267	57.00%	311	66.50%	356	76.00%	400	85.50%	445	95.00%
Other non-aluminum	287	0.37%	0	0.00%	14	5.00%	29	10.00%	43	15.00%	57	20.00%	72	25.00%	86	30.00%	101	35.00%	115	40.00%	129	45.00%	144	50.00%
Other Non-Ferrous Metals (Total)	945	1.22%	9	0.92%	76	8.05%	144	15.19%	211	22.33%	278	29.47%	346	36.61%	413	43.75%	481	50.88%	548	58.02%	616	65.16%	683	72.30%
Total Metals	6,385	8.22%	329	5.15%	747	11.70%	1,165	18.25%	1,583	24.80%	2,001	31.35%	2,420	37.90%	2,838	44.45%	3,256	51.00%	3,674	57.55%	4,092	64.10%	4,511	70.65%
PET Containers	696	0.90%	251	36.02%	281	40.41%	312	44.81%	343	49.21%	373	53.61%	404	58.01%	435	62.41%	465	66.80%	496	71.20%	526	75.60%	557	80.00%
HDPE Containers	651	0.84%	242	37.20%	260	39.98%	278	42.76%	296	45.54%	315	48.32%	333	51.10%	351	53.88%	369	56.66%	387	59.44%	405	62.22%	423	65.00%
Other Plastic (3-7) Containers	144	0.19%	43	30.00%	49	34.00%	55	38.00%	61	42.00%	66	46.00%	72	50.00%	78	54.00%	84	58.00%	89	62.00%	95	66.00%	101	70.00%
Film Plastic	4,419	5.69%	0	0.00%	177	4.00%	354	8.00%	530	12.00%	707	16.00%	884	20.00%	1,061	24.00%	1,237	28.00%	1,414	32.00%	1,591	36.00%	1,768	40.00%
Other Plastic																								
Durables	2,415	3.11%	0	0.00%	72	3.00%	145	6.00%	217	9.00%	290	12.00%	362	15.00%	435	18.00%	507	21.00%	580	24.00%	652	27.00%	725	30.00%
Non-Durables	1,312	1.69%	0	0.00%	46	3.50%	92	7.00%	138	10.50%	184	14.00%	230	17.50%	275	21.00%	321	24.50%	367	28.00%	413	31.50%	459	35.00%
Packaging	985	1.27%	0	0.00%	64	6.50%	128	13.00%	192	19.50%	256	26.00%	320	32.50%	384	39.00%	448	45.50%	512	52.00%	576	58.50%	641	65.00%
Other Plastic (Total)	4,712	6.06%	0	0.00%	182	3.87%	365	7.74%	547	11.61%	730	15.48%	912	19.36%	1,094	23.23%	1,277	27.10%	1,459	30.97%	1,642	34.84%	1,824	38.71%
Total Plastics	10,623	13.67%	536	5.05%	950	8.94%	1,363	12.84%	1,777	16.73%	2,191	20.62%	2,604	24.52%	3,018	28.41%	3,432	32.31%	3,845	36.20%	4,259	40.10%	4,673	43.99%
Glass Containers	3,028	3.90%	865	28.56%	1,036	34.21%	1,207	39.85%	1,377	45.49%	1,548	51.14%	1,719	56.78%	1,890	62.43%	2,061	68.07%	2,232	73.71%	2,403	79.36%	2,573	85.00%
Other Glass	298	0.38%	0	0.00%	18	6.00%	36	12.00%	54	18.00%	72	24.00%	90	30.00%	107	36.00%	125	42.00%	143	48.00%	161	54.00%	179	60.00%
Total Glass	3,326	4.28%	865	26.00%	1,054	31.68%	1,242	37.35%	1,431	43.03%	1,620	48.70%	1,809	54.38%	1,997	60.05%	2,186	65.73%	2,375	71.41%	2,564	77.08%	2,753	82.76%
Food Scraps	10,634	13.68%	0	0.00%	532	5.00%	1,063	10.00%	1,595	15.00%	2,127	20.00%	2,658	25.00%	3,190	30.00%	3,722	35.00%	4,253	40.00%	4,785	45.00%	5,317	50.00%
Yard Trimmings	5,852	7.53%	0	0.00%	497	8.50%	995	17.00%	1,492	25.50%	1,990	34.00%	2,487	42.50%	2,984	51.00%	3,482	59.50%	3,979	68.00%	4,477	76.50%	4,974	85.00%
Total Organics	16,485	21.21%	0	0.00%	1,029	6.24%	2,058	12.48%	3,087	18.73%	4,116	24.97%	5,145	31.21%	6,174	37.45%	7,204	43.70%	8,233	49.94%	9,262	56.18%	10,291	62.42%
Clothing Footwear, Towels, Sheets	3,018	3.88%	0	0.00%	181	6.00%	362	12.00%	543	18.00%	724	24.00%	905	30.00%	1,086	36.00%	1,267	42.00%	1,449	48.00%	1,630	54.00%	1,811	60.00%
Carpet	1,161	1.49%	0	0.00%	58	5.00%	116	10.00%	174	15.00%	232	20.00%	290	25.00%	348	30.00%	406	35.00%	464	40.00%	522	45.00%	580	50.00%
Total Textiles	4,178	5.38%	0	0.00%	239	5.72%	478	11.44%	717	17.17%	956	22.89%	1,195	28.61%	1,435	34.33%	1,674	40.06%	1,913	45.78%	2,152	51.50%	2,391	57.22%

Chemung County
Municipal Solid Waste (MSW) Combined Composition Analysis and Projections

Material	Tons Generated	% of Total	2010		2016		2017		2018		2019		2020		2021		2022		2023		2024		2025	
			Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted
Total Wood	3,403	4.38%	0	0.00%	119	3.50%	238	7.00%	357	10.50%	476	14.00%	595	17.50%	715	21.00%	834	24.50%	953	28.00%	1,072	31.50%	1,191	35.00%
C&D Materials	3,783	4.87%	0	0.00%	170	4.50%	340	9.00%	511	13.50%	681	18.00%	851	22.50%	1,021	27.00%	1,192	31.50%	1,362	36.00%	1,532	40.50%	1,702	45.00%
Other Durables	1,278	1.65%	0	0.00%	51	4.00%	102	8.00%	153	12.00%	205	16.00%	256	20.00%	307	24.00%	358	28.00%	409	32.00%	460	36.00%	511	40.00%
Diapers	1,282	1.65%	0	0.00%	32	2.50%	64	5.00%	96	7.50%	128	10.00%	160	12.50%	192	15.00%	224	17.50%	256	20.00%	288	22.50%	321	25.00%
Electronics	1,197	1.54%	20	1.67%	126	10.50%	231	19.34%	337	28.17%	443	37.00%	549	45.84%	654	54.67%	760	63.50%	866	72.33%	972	81.17%	1,077	90.00%
Tires	1,279	1.65%	0	0.00%	115	9.00%	230	18.00%	345	27.00%	461	36.00%	576	45.00%	691	54.00%	806	63.00%	921	72.00%	1,036	81.00%	1,151	90.00%
HHW	261	0.34%	0	0.00%	21	8.00%	42	16.00%	63	24.00%	84	32.00%	105	40.00%	125	48.00%	146	56.00%	167	64.00%	188	72.00%	209	80.00%
Fines	235	0.30%	0	0.00%	5	2.00%	9	4.00%	14	6.00%	19	8.00%	23	10.00%	28	12.00%	33	14.00%	38	16.00%	42	18.00%	47	20.00%
Total Miscellaneous	9,316	11.99%	20	0.21%	520	5.58%	1,020	10.95%	1,520	16.31%	2,020	21.68%	2,519	27.04%	3,019	32.41%	3,519	37.78%	4,019	43.14%	4,519	48.51%	5,019	53.87%
Total	77,709	100.00%	8,978	11.55%	12,754	16.41%	16,530	21.27%	20,306	26.13%	24,082	30.99%	27,858	35.85%	31,634	40.71%	35,410	45.57%	39,186	50.43%	42,963	55.29%	46,739	60.15%

Population (Actual & Projected)	88,830	yr2010	88,230	est.	87,930	est.	87,630	est.	87,330	est.	87,030	est.	86,730	est.	86,430	est.	86,130	est.	85,830	est.	85,530	est.	85,230	est.
MSW Generated (tons)	77,709		77,201		76,939		75,581		75,322		75,063		74,588		73,466		73,211		72,956		72,701		72,446	
MSW Diverted (tons)			8,978		12,754		16,530		20,306		24,082		27,858		31,634		35,410		39,186		42,963		46,739	
MSW Disposed (tons)			68,223		64,185		59,051		55,016		50,981		46,729		41,831		37,800		33,769		29,738		25,707	
Per Capita MSW Generated (lbs)	1,750		1,750		1,750		1,725		1,725		1,725		1,720		1,700		1,700		1,700		1,700		1,700	
Per Capita MSW Diverted (lbs)			204		290		377		465		553		642		732		822		913		1,005		1,097	
Per Capita/year MSW Disposed (lbs)			1,546		1,460		1,348		1,260		1,172		1,078		968		878		787		695		603	
Per Capita/day MSW Disposed (lbs)			4.2		4.0		3.7		3.5		3.2		3.0		2.7		2.4		2.2		1.9		1.7	

A3 – C&D Composition Table

Chemung County

Construction and Demolition (C&D) Debris Detailed Composition Analysis Year 2010

Material	C&D DEBRIS GENERATED									
	Residential				Non- Residential				Infrastructure/ Other	Planning Unit/ Municipality Percentages
	New Construction	Renovation	Demolition	Combined Residential	New Construction	Renovation	Demolition	Combined Non-Residential	Infrastructure/ Other	
	11.00%	**29.00%**	**60.00%**	**100.00%**	**13.00%**	**48.00%**	**39.00%**	**100.00%**	**100.00%**	**0.00%**
Concrete/Asphalt/Rock/Brick	9.80%	16.10%	21.50%	18.65%	30.70%	19.10%	23.10%	22.17%	46.00%	0.00%
Wood	29.90%	19.10%	25.70%	24.25%	22.70%	12.40%	24.20%	18.34%	10.50%	0.00%
Roofing	6.00%	22.00%	6.10%	10.70%	2.10%	21.20%	5.10%	12.44%	0.00%	0.00%
Drywall	15.60%	7.90%	5.10%	7.07%	4.60%	6.40%	4.30%	5.35%	0.00%	0.00%
Soil/Gravel	11.30%	7.10%	18.50%	14.40%	13.10%	6.50%	15.60%	10.91%	38.00%	0.00%
Metal	5.30%	11.30%	5.20%	6.98%	12.00%	15.50%	11.10%	13.33%	2.40%	0.00%
Plastic	1.50%	0.70%	0.30%	0.55%	0.50%	0.70%	0.30%	0.52%	0.30%	0.00%
Corrugated/Paper	9.30%	2.90%	3.10%	3.72%	7.10%	4.60%	4.20%	4.77%	0.30%	0.00%
Other	11.30%	12.90%	14.50%	13.68%	7.20%	13.60%	12.10%	12.18%	2.50%	0.00%
Total	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**0.00%**

A4 – C&D Diversion Table

Chemung County

Construction and Demolition (C&D) Debris Combined Composition Analysis and Projections

Material	Tons Generated	% of Total			YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5		YEAR 6		YEAR 7		YEAR 8		YEAR 9		YEAR 10	
				2010	2016		2017		2018		2019		2020		2021		2022		2023		2024		2025	
				Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted	Tons Diverted	% Diverted
Concrete/Asphalt/Rock/Brick	5,626	35.39%		0	0.00%	2,532	45.00%	4,782	85.00%	4,782	85.00%	4,782	85.00%	5,064	90.00%	5,064	90.00%	5,064	90.00%	5,064	90.00%	5,064	90.00%	5,064	90.00%
Wood	2,352	14.80%		0	0.00%	941	40.00%	941	40.00%	941	40.00%	941	40.00%	1,059	45.00%	1,059	45.00%	1,059	45.00%	1,176	50.00%	1,176	50.00%	1,176	50.00%
Roofing	783	4.93%		0	0.00%	235	10.00%	353	15.00%	353	15.00%	353	15.00%	588	25.00%	588	25.00%	588	25.00%	706	30.00%	706	30.00%	706	30.00%
Drywall	403	2.54%		0	0.00%	40	10.00%	61	15.00%	61	15.00%	61	15.00%	81	20.00%	81	20.00%	81	20.00%	81	20.00%	101	25.00%	101	25.00%
Soil/Gravel	4,326	27.22%		0	0.00%	865	20.00%	1,082	25.00%	1,082	25.00%	1,298	30.00%	1,514	35.00%	1,514	35.00%	1,514	35.00%	1,514	35.00%	1,731	40.00%	1,731	40.00%
Metal	940	5.91%		0	0.00%	470	50.00%	470	50.00%	517	55.00%	517	55.00%	564	60.00%	564	60.00%	611	65.00%	658	70.00%	705	75.00%	752	80.00%
Plastic	63	0.40%		0	0.00%	6	10.00%	6	10.00%	6	10.00%	9	15.00%	9	15.00%	9	15.00%	9	15.00%	13	20.00%	13	20.00%	13	20.00%
Corrugated/Paper	318	2.00%		0	0.00%	48	15.00%	64	20.00%	64	20.00%	79	25.00%	79	25.00%	95	30.00%	95	30.00%	95	30.00%	111	35.00%	127	40.00%
Other	1,084	6.82%		0	0.00%	108	10.00%	136	12.50%	163	15.00%	190	17.50%	217	20.00%	244	22.50%	271	25.00%	298	27.50%	325	30.00%	271	25.00%
Total	15,897	100.00%		0	0.00%	5,246	33.00%	7,893	49.65%	7,968	50.12%	8,230	51.77%	9,175	57.71%	9,218	57.98%	9,292	58.45%	9,604	60.42%	9,931	62.47%	9,940	62.52%

Appendix B

Copy of the Separation and Segregation of Recyclables or Reusable Material Law

Repealed 2021

RESOLUTION NO. 89-190

RESOLUTION ENACTING A LOCAL LAW ESTABLISHING CERTAIN STANDARDS, REGULATIONS, RULES AND PROCEDURES FOR DISPOSITION OF SOLID WASTE AS DEFINED FOR THE CHEMUNG COUNTY SOLID WASTE DISPOSAL DISTRICT AND PROVIDING FOR THE ESTABLISHMENT AND COLLECTION OF CHARGES THEREFOR

By: Bush

Seconded by: May

RESOLVED, that the following Local Law Introductory No. 1 for the year 1989, which has been introduced and filed with the Chemung County Legislature seven (7) calendar days, exclusive of Sunday, upon the desks of the members of the County Legislature of the County of Chemung as required by law, be and the same is hereby enacted and promulgated by the County Legislature of the County of Chemung, as follows:

LOCAL LAW INTRO. NO 1 FOR 1989

COUNTY OF CHEMUNG

LOCAL LAW NO 2 FOR THE YEAR 1989

A Local Law Establishing Certain Standards, Regulations, Rules and Procedures for Disposition of Solid Waste as defined for the Chemung County Solid Waste Disposal District and Providing for the Establishment and Collection of Charges Therefor and Prescribing Penalties for the Violation Thereof.

Be It Enacted by the County Legislature of the County of Chemung as follows:

ARTICLE 1
TITLE AND AUTHORITY

SECTION 1.1-SHORT TITLE

a. This law shall be known as the "Chemung County Solid Waste Management Law."

SECTION 1.2-EMPOWERING LEGISLATION

a. This Solid Waste Management Law is enacted pursuant to Article 5-A of the County Law.

ARTICLE 2
PURPOSE AND INTERPRETATION

SECTION 2.1-DECLARATION OF POLICY

The purpose of this law is to empower the County of Chemung through its Administrative Board of the Chemung County Solid

Waste Disposal District (CCSWDD) to regulate the disposition of solid waste effectively as defined herein by the establishment of certain standards, regulations, rules and procedures as are set forth herein, all for the protection of the public health, safety and welfare and enhancement of the environment of the people of the County of Chemung. This law is intended to regulate and control the disposition of solid waste generated within the County of Chemung. The County Legislature determines that the well-ordered management of solid waste at the County level of government provides the most safe, sanitary, environmentally sound and feasible manner of responding to the solid waste needs of all the citizens of the County. The County Legislature further recognizes that a need exists within the County of Chemung for the County to assume this larger and expanding role in the solid waste problems of the city, towns and villages located within this County in that such city, towns and villages are now less able to effectively solve their solid waste problems due to the growing volumes of the solid waste generated, the rising costs of solid waste disposal and the increasing environmental and regulatory controls thereof.

SECTION 2.2 -DEFINITIONS

1. "Solid Waste" and related terms.

(a) "Solid Waste" means all putrescible and non-putrescible materials or substances, (except as hereinafter stated,) that are discarded or rejected as being spent, useless, worthless or in excess to the owners at the time of such discard or rejection, including but not limited to garbage, refuse, industrial and commercial waste, sludges from air or water treatment facilities, rubbish, tires, ashes, contained gaseous

material, incinerator residue, construction and demolition debris, discarded automobiles and offal.

(i) "Ash residue" means all the solid residue and any entrained liquids resulting from the combustion of solid waste at a solid waste incinerator, including bottom ash, boiler ash, fly ash, and the solid residue of any air pollution control device used a a solid waste incinerator.

(ii) "Commercial Waste" means solid waste generated by stores, offices, restaurants, warehouses, and other non-manufacturing activities other than household and industrial waste.

(iii) "Garbage" means putrescible solid waste including animal and vegetable waste resulting from the handling, storage, sale, preparation, cooking or serving of foods. Garbage originates primarily in home kitchens, stores, markets, restaurants, and other places where food is stored, prepared, or served.

(iv) "Industrial waste" means solid waste generated by manufacturing or industrial processes. Such waste may include, but is not limited to, the following manufacturing processes: Electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

(v) "Sludge"- includes any solid or semi-solid waste generated from Chemung County plants that are not considered hazardous, that have a minimum solids content of 20% with no evidence of free moisture in the dewatered sludge and whose net weight does not exceed 25% of the total solid waste being landfilled on a daily basis.

(vi) Materials from minor home repairs and

normal household maintenance are included as solid wastes.

(b) A material is" discarded" if it is abandoned by being:

(i) disposed of;

(ii) burned or incinerated, including being burned as a fuel for the purpose of recovering usable energy; or

(iii) accumulated, stored, or physically, chemically, or biologically treated (other than burned or incinerated) instead of or before being disposed of.

(c) A material is" disposed" of if it is discharged deposited, injected, dumped, spilled, leaked, or placed into or on any land or water so that such material or any constituent thereof may enter the environment or be emitted into the air or discharged into groundwater or surface water.

(d) The following are <u>not</u> solid waste for the purposes of this Local Law.

(i) domestic sewage;

(ii) any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly owned treatment works for treatment;

(iii) industrial wastewater discharges that are actual point source discharges subject to permits under ECL Article 17. Industrial wastewaters while they are being collected, stored, or treated before discharge, and sludges that are generated by industrial wastewater treatment are solid wastes and are regulated by this Local Law.

(iv) irrigation return flows;

(v) radioactive materials which are source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended , 42 USC 2011 et seq. (see subdivision 360-1.3{a}); and

(vi) materials subject to in-situ mining techniques which are not removed from the ground as part of the extraction process.

(vii) Special Wastes - includes, but is not limited to materials from solid industrial processing wastes, condemned or dead animals and animal and food wastes from slaughterhouses,food processing facilities, markets, butcher

shops and similar establishments. (Materials from minor home repairs and normal household maintenance are included as solid waste and not special wastes.)

(viii) Special Bulky Wastes - includes blocks of masonry in excess of 100 lbs., trees (trunk sections) in excess of 16" diameter (trees, logs and branches less than 16" in diameter shall not exceed 8' in length), junk motor vehicles, steel cables, hardened shafts and gears, large thick walled or solid metallic objects such as castings or forgings; "construction and demolition debris as hereinafter stated."

(ix) Hazardous Wastes- includes those wastes which may cause serious injury or disease during their normal storage, collection and disposal cycle, and pose a substantial present or potential hazard to human health or the environment, including but not limited to flammable or explosive materials, including gasoline and paint cans, propane and butane bottles and cylinders, pathological and potentially infectious wastes, radioactive materials, poisons, acids and dangerous chemicals or combination of chemicals. Those items listed as hazardous wastes under rules and regulations of the New York State Department of Environmental Conservation (6 NYCRR, Part 371) and identified and listed by the U.S. Environmental Protection Agency; in the Resource Conservation and Recovery Act(40 C.F.R., Section 261) as said regulations now exist or are hereinafter amended each of which are incorporated herein by reference. Any exemptions granted to any of the hazardous wastes as above indicated by either the New York State Environmental Conservation Laws Rules and Regulations and policy or the Federal Resource Conservation and Recovery Act shall still be deemed a hazardous waste under this section and not exempted.

2. "Asbestos waste" for the purposes of this Local Law is friable solid waste that contains more than one percent asbestos by weight and can be crumbled, pulverized, or reduced to powder when dry, by hand pressure. Asbestos waste also includes any asbestos-containing solid waste that is collected in a pollution control device designed to remove asbestos. Such waste is a hazardous waste.

3. CCSWDD shall mean Chemung County Solid Waste Disposal District as established under Article 5-A of the County Law.

4. "Composting facility" means a solid waste management facility used to provide aerobic, thermophilic decomposition of solid organic constituents of solid waste to produce a stable, humus-like material.

5. "Construction and demolition debris"(a Special

Bulky Waste) means uncontaminated, inert solid waste resulting from the construction, remodeling, repair and demolition of structures, and from road building and land clearing. Such waste includes, but is not limited to, bricks, concrete and other masonry materials, soil, rock, wood, wall coverings, plaster, drywall, plumbing fixtures, non-asbestos insulation, roofing shingles, asphaltic pavement, glass, plastics that are not sealed in a manner that conceals other wastes, and metals that are incidental to any of the above. Solid waste that is not construction and demolition debris (even if resulting from the construction, remodeling, repair and demolition of structures, and from road building and land clearing) includes, but is not limited to, asbestos waste, garbage, corrugated container board, electrical fixtures and components, carpeting, furniture, appliances, tires, drums and containers, and fuel tanks. Specifically excluded from the definition of construction and demolition debris is solid waste (including what otherwise would be construction and demolition debris) resulting from any processing technique that renders individual waste components unrecognizable, such as pulverizing or shredding.

6. "Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

7. "ECL" means Chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

8. "Free liquids" means liquids which readily separate from the solid portion of a solid waste under normal conditions as measured by the paint filter test.

9."Generator" means any person whose act or process produces a solid waste or whose act first causes solid waste to be subject to regulation under this Title.

10. "Household hazardous waste" means household waste which but for their point of generation, would be a hazardous waste under Part 371 of this Title, including pesticides as defined in ECL Article 33.

11. "Household waste" means solid waste discarded from single or multiple dwellings, hotels, motels, campsites, ranger stations, and other residential sources.

12. "Infectious waste" means and includes the following:

(i) surgical waste, which consists of materials discarded from surgical procedures involving the treatment of a

patient on isolation, other than patients on reverse or protective isolation;

(ii) obstetrical waste, which consists of materials discarded from obstetrical procedures involving the treatment of a patient on isolation, other than patients on reverse or protective isolation;

(iii) pathological waste, which consists of discarded human tissues and anatomical parts which are discarded from surgery, obstetrical procedures, autopsy and laboratory procedures;

(iv) biological waste, which consists of discarded excretions, exudates, secretions, suctionings, and disposable medical supplies which have come in contact with these substances that cannot be legally discarded directly into a sewer and that emanate from the treatment of a patient on isolation, other than patients on reverse or protective isolation;

(v) discarded materials soiled with blood emanating from the treatment of a patient on isolation, other than patients on reverse or protective isolation;

(vi) all waste being discarded from renal dialysis, including tubing and needles;

(vii) discarded serums and vaccines that have not been autoclaved or returned to the manufacturer or point of origin;

(viii) discarded laboratory waste which has come in contact with pathogenic organisms and which has not been rendered non-infectious by autoclaving or other sterilization techniques;

(ix) animal carcasses exposed to pathogens in research, their bedding, and other waste from such animals that is discarded; and

(x) other articles that are being discarded that are potentially infectious and that might cause punctures or cuts, including intravenous tubing with needles attached, that have not been autoclaved or subjected to a similar sterilization technique and rendered incapable of causing punctures or cuts.

13. "Landfill" means a disposal facility or part of one at which solid waste, or its residue after treatment, is intentionally placed in or on land, and at which solid waste will remain after closure and which is not a landspreading facility, a surface impoundment, or an injection well.

14. "Licensee" - shall mean any person issued a valid license to haul or transfer waste or to construct, establish, maintain or operate a solid waste facility.

15. "Mixed solid waste" means combinations of putrescible and non-putrescible waste materials.

16. "Municipality" means a county, village, town, city, any designated agency thereof, a solid waste management district, a public benefit corporation having power granted otherwise than under ECL Article 51 to construct, operate, and maintain a solid waste management facility, including a public corporation created pursuant to agreement or compact with another state; or any combination thereof.

17. "Person" means any individual, public or private corporation, political subdivision, government agency, authority, department or bureau of the State, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatsoever.

18. "Processing facility" means a combination of structures, machinery, or devices, other than collection and transfer vehicles, utilized to reduce or alter the volume or the chemical or physical characteristics of solid waste through processes such as, but not limited to, separating, baling or shredding, before its delivery to a landfill, composting facility or solid waste incinerator.

19. "Putrescible" means the tendency of organic matter to decompose with the formation of foul smelling by-products.

20. " Recover" means any act or process by which solid waste is separated from the solid waste stream for recycling.

21. " Recycle" means the reuse of solid waste recovered from the solid waste stream into goods or materials suitable for reuse in original or changed form.

22. " Refuse" means anything putrescible or non-putrescible that is discarded or rejected as useless or worthless.

23. " Residuals" means sludge, sewage sludge, septage, air pollution control facility waste, or any other such waste having similar characteristics or effects; and solid waste remaining after the processing of solid waste by composting methods that was not made into compost subject to use.

"Residue" means all solid waste remaining after

treatment and includes, but is not limited to, ash residue and other solid waste which is not recovered or combusted.

24. "Resource recovery facility" means a combination of structures, machinery, or devices, utilized to separate, process, modify, convert, treat, or prepare collected solid waste so that component materials or substances or recoverable resources may be recovered or used as a raw material or energy source.

25. " Service area" means the geographical area serviced by a solid waste management facility from which solid waste is generated and collected for delivery to that facility.

26. " Solid Waste Hauler" includes any person duly licensed to transport solid waste to Chemung County Solid Waste Disposal District.

27. " Solid waste management facility" means any facility employed beyond the initial solid waste collection process for the management of solid waste including, but not limited to: storage areas or facilities; transfer stations; rail-haul or barge-haul facilities; processing facilities; landfills; disposal facilities; solid waste incinerators; landspreading facilities; composting facilities; surface impoundments; and waste oil storage, reprocessing, rerefining facilities, recycling facilities, and waste tire storage facilities.

28. " Source separation" means dividing solid waste into some or all of its component parts at the point of generation.

29. " Transfer station" means a combination of structures, machinery or devices at a place or facility where solid waste is taken from collection vehicles and placed in other transportation units for movement to another solid waste management facility.

30. "Transporter" means a person engaged in the off-site transportation of solid waste by air, rail, highway, or water.

31. " Trash" means any non-putrescible portion of the solid waste stream including, but not limited to, paper, glass metals, and plastics.

32. " Untreatable waste" means the same as defined in ECL 27-0704. Untreatable waste for a solid waste facility would include, but not be limited to: batteries, such as dry cell batteries, mercury batteries and vehicle batteries; refrigerators; stoves; freezers; washers; dryers; bedsprings; vehicle frame parts, crankcases, transmissions, and engines; lawn mowers; snow blowers; bicycles; file cabinets; air conditioners;

hot water heaters; water storage tanks; water softeners; furnaces; oil storage tanks; metal desks; propane tanks; and clean fill and any other materials that may be deemed untreatable by the General Manager.

33. " Vehicle" means any motor vehicle, trailer, water vessel, railroad car, airplane, or other device for transporting solid waste.

34. " Waste tire" means any tire that has ceased to serve the purpose for which it was initially intended due to factors such as, but not limited to, wear, or imperfections and has been discarded.

35. " Yard waste" means leaves, grass, clippings, garden debris, vegetative residuals that are visually recognizable as part of a plant or vegetable, and small or chipped branches.

ARTICLE 3
ADMINISTRATION

SECTION 3.1-FUNCTIONS, POWERS, AND ADMINISTRATIVE RESPONSIBILITIES.

a. It shall be the duties and responsibility of the Chemung County Solid Waste Disposal District (CCSWDD) and through its Administrative Board as follows:

1. To have and exercise all powers and duties as head of an administrative unit of county government as conferred by law for Solid Waste Management in Chemung County and perform such other functions and other matters as the County Legislature may from time to time direct or delegate.

2. To appoint a General Manager to carry out the functions and duties as delegated by said Administrative Board.

3. To make such contracts as may be required, and within budget appropriations; to carry out its functions for Solid Waste Management and disposition of solid waste.

4. To supervise the execution of those applicable laws, rules and regulations pertaining to solid waste management.

5. To promulgate scale of charges, reasonable standards, regulations, rules and procedures pertaining to solid waste management within the authority of the provisions of this local law, Art. 5-A of the County Law or any other Federal or State laws.

6. To revise, amend and repeal such standards, regulations, rules and procedures as necessary pursuant to law .

7. To license all services pertaining to the transfer, treatment and disposal of all solid waste except as specifically excluded herein.

8. To investigate all violations and grievances reported under this local law.

9. To initiate action against any licensee for forfeiture or suspension of a license for good cause.

10. To receive and investigate license applications and to approve or deny issuance of licenses to perform services regulated by this law.

11. To suspend the license of any licensee found to be in violation of the provisions of this law until said violations cease or have been corrected to the satisfaction of the Administrative Board of the Chemung County Solid Waste Disposal District

12. To issue notices and citations of violations of this local law.

13. To direct its attorney to institute the necessary proceedings to prosecute violations of this local law.

SECTION 3.2- RELATIONSHIP TO OTHER PROGRAMS.

a. Nothing in this law shall be construed to supersede the minimum standards and requirements in any New York State or federal law or code relative to solid waste management or the operation of any vehicle, equipment or process which shall govern when and where any provision of this law is found to be inconsistent with said minimum standard.

b. This law shall seek to provide a coordinated county-wide program of solid waste management in cooperation with Federal,

State, regional and local agencies responsible for the prevention, control or abatement of air, surface water and ground water pollution.

ARTICLE 4

GENERAL STANDARDS AND REGULATIONS

SECTION 4.1-GENERAL

a. All solid waste as herein defined and except as herein stated and generated within Chemung County shall be hauled transported and disposed of at an authorized and approved solid waste facility operated by the District and shall be subject to the licensing requirement of this law.

b. Solid waste generated outside Chemung County shall not be accepted at facilities of the Chemung County Solid Waste Disposal District unless prior approval is given by the County Legislature of Chemung after recommendation by the Administrative Board of the Chemung County Solid Waste Disposal District and the County Executive.

c. A license shall be required to operate all solid waste hauling or transfer vehicles including vehicles owned, leased, or operated by persons, corporations, municipal governments or departments thereof or public improvement or special districts which use the CCSWDD facilities for disposal or recycling of solid waste.

d. The payment of application and license fees shall not be required if the applicant is a governmental agency acting in a

governmental capacity.

SECTION 4.2-PROHIBITED ACTIVITIES

a. It shall be unlawful for any person to transport to Chemung County Solid Waste Disposal Facilities for the purpose of disposing or to dispose of any solid waste without obtaining a license as required herein.

b. This section shall not apply to any private resident who occasionally transports or disposes any solid waste generated on the property at which he resides, or to any institution or business establishment not in the business or practice of solid waste hauling or disposal which occasionally transports or disposes of any solid waste generated by such institutions or business establishment at its place of business.

c. " Excluded Solid Wastes"," Special Wastes"," Special Bulky Wastes" and "Hazardous Wastes" are prohibited from being disposed at Chemung County Solid Waste Disposal District facilities. Variances to dispose certain excluded wastes, i.e. Special Wastes, Special Bulky Wastes and soil and debris from gasoline and oil remediation sites which shall have become non-hazardous, may be given upon written request which may require prior approval by the Chemung County Health Department and/or the New York State Department of Environmental Conservation or any other appropriate governmental agency. Applications for said variance shall be subject to the terms and conditions of Section 6 of this local law as well as any other provisions herein or statutes, rules and regulations applicable to said

haul or transfer said solid waste and recyclable material. It shall be a violation of this Local Law for any person without authority to collect, pickup, remove or cause to be collected, picked up or removed any solid waste and recyclable material placed at the roadside or other designated area and each such collection, picking up, or removal from one or more premises shall constitute a separate and distinct offense in violation of this ordinance. A resident may dispose of their recyclables by selling or donating the same to recyclers, but these recyclables may not be picked up at the roadside.

b. All right, title and interest in and to all solid waste delivered to solid waste facilities owned by the Chemung County Solid Waste Disposal District shall pass from the solid waste hauler to the Chemung County Solid Waste Disposal District when and at such time that the solid waste contained in such hauler's vehicle is deposited in or upon such facilities. Title shall be vested irrevocably in CCSWDD so long as such solid waste remains in the possession and control of CCSWDD or its agent. No other indication or evidence of title shall be required to assert title to such waste by CCSWDD. Notwithstanding the aforesaid, and even though title passes to CCSWDD, the person owning and/or hauling the said solid waste shall be liable for the quality of said waste if it is in violation of this Local Law or any other Federal, State, or other governmental agency applicable thereto.

c. Title to solid waste deposited by any person in a solid waste

facility owned by the Chemung County Solid Waste Disposal District, (which facility's primary purpose is to process solid waste in such a manner that will produce at the completion of such process a product or commodity which may have a market value,) shall vest with the Chemung County Solid Waste Disposal District.

SECTION 4.4 LICENSE VEHICLE REGULATIONS

a. All vehicles hauling solid waste shall be provided with a means of covering the solid waste in transport and keeping such solid waste securely within the hauling body as defined by any state or governmental agency.

b. All vehicles used for collection and removal of solid waste shall be kept in a clean and sanitary condition to minimize the escape of noxious or disagreeable odor or the escape of any vehicle's contents, either liquid or solid.

c. All vehicles used to haul or transport solid waste shall be subject to inspection by employees of the District for the purpose of determining compliance with the requirements of this section at the CCSWDD site.

d. All vehicles using the scale facilities shall be tare weighed at least once each year and at such other times as determined by the CCSWDD agents or employees.

e. All licensed haulers who desire to charge, shall have a surety bond or cash deposit in excess of their charges for the billing period and approved by the CCSWDD Administrative Board.

f. All licensed haulers must maintain such insurance coverage

required as established by the Administrative Board of the Chemung County Solid Waste Disposal District.

SECTION 4.5-OPERATION OF SOLID WASTE DISPOSAL FACILITIES

a. The Chemung County Solid Waste Disposal Facilities shall be operated at the times posted and as determined by the Administrative Board of Chemung County Solid Waste Disposal District.

b. If special conditions warrant, these times may be extended in conjunction with additional negotiated payments for such extended services.

ARTICLE 5
LICENSES AND FEE REQUIREMENTS

SECTION 5-LICENSES AND FEES

a. Applications. All persons required to obtain a license shall make an application therefor to the General Manager of the Chemung County Solid Waste Disposal District.

b. Expiration. All licenses are non-transferrable and shall expire on December 31st of each year unless otherwise stated on the license or revoked sooner for just cause.

c. Renewal Applications. License renewal applications shall be filed a minimum of thirty(30) days prior to expiration of the license. An extension of time not to exceed ninety(90) days may be granted by the CCSWDD upon request in writing on business letterhead of the licensee showing just reason for the request.

variance.

d. All " construction and demolition debris" as herein defined and which is to be transported and disposed of at the solid waste facility shall not be mixed with any other solid wastes and must be identified and certified as such by the person hauling said unmixed construction and demolition material. If said construction and demolition debris is mixed with any other solid wastes, it shall not be accepted by CCSWDD nor disposed of at the solid waste facility. " Such construction and demolition debris to be disposed of at the CCSWDD, (provided said CCSWDD has a site for disposal thereof), shall be made by application for disposal of construction and demolition waste to the General Manager of the CCSWDD as required by the rules and regulations adopted therefore.

e. All yard waste as herein defined may be regulated and prohibited from being transported and disposed of at the solid waste facility. Said regulated waste may be reguired to be separated and identified as yard waste for recycling as herein stated.

SECTION 4.3-TITLE TO SOLID WASTE AND PROHIBITION FOR REMOVAL:

a. From the time of placement of solid waste and recyclable materials at the roadside or other designated area approved by a hauler for collection, such solid waste and recyclable material shall be delivered to the appropriate facility of the CCSWDD by the person who has been issued a valid license by the CCSWDD to

d. Renewal License. Renewal licenses shall be issued upon compliance with all standards and requirements established for a license. The General Manager may issue special licenses for transporting and disposing solid waste on a one time basis at a fee to be determined on a case by case basis by CCSWDD.

e. Emergency Substitutions. In the event of an emergency or vehicle breakdown, a spare vehicle not under the license may be substituted for the licensed vehicle under the terms and conditions established by the General Manager of the Chemung County Solid Waste Disposal District and such temporary license shall be for a period not to exceed thirty (30)days.

f. Display of License. Any license issued by the CCSWDD shall be kept on the vehicle at all times and shall be displayed upon request of the CCSWDD or its agents.

SECTION 5.1-FEES

a. Solid Waste Hauling License Fee

1. The annual license fee or fees shall be established by the Administrative Board of the CCSWDD in accordance with the laws applicable thereto.

2. The payment of application and license fees shall not be required if the applicant is a municipality or governmental agency as hereinbefore stated.

SECTION 5.2-INSURANCE

a. Insurance Requirements. The licensee shall obtain the insurance coverage as may from time to time be promulgated by the Administrative Board of the CCSWDD.

SECTION 6 - TERMS AND CONDITIONS FOR THE ISSUANCE OF PERMITS FOR CERTAIN TYPES OF WASTES

SECTION 6.1-POWER TO INSPECT.

All users of the Chemung County Solid Waste Disposal District (CCSWDD) Facilities are deemed to have consented to inspection necessary for the orderly administration of this Local Law and the Rules and Regulations of the Chemung County Solid Waste Disposal District. Inspection will be accomplished during hours of operation or at the period of use with or without notice to the users. Inspection shall be performed in such a manner as to reasonably observe and quantify, if necessary, the characteristics of the wastes to be discharged into the Chemung County Solid Waste Disposal Facilities.

SECTION 6.2 - POWERS AND AUTHORITY OF INSPECTORS

As provided hereunder the General Manager and his duly authorized representatives and designated representatives of USEPA, NYSDEC may enter upon private lands for the purpose of inspection, observation, measurement, sampling and testing in accordance with the provisions of this law or the rules of the Chemung County Solid Waste Disposal District. Inspectors may review and copy any records rquired to be kept on-site. The General Manager or his representatives shall have no authority to inquire into any processes used in any industrial operation beyond that point having a direct bearing on the kind and source of the waste as defined hereunder.

Refusal to permit the entry upon private lands required to perform the necessary work referred to in this Section, shall be punishable by such penalties as may be prescribed by these rules and regulations.

SECTION 6.3-PERMITS WHEN REQUIRED.

It shall be unlawful for any person to discharge directly or indirectly into Chemung County Solid Waste Facilities any "Special Wastes" and" Special Bulky Wastes" and "Hazardous Wastes," as defined herein under Section 2.2. Special Wastes, Special Bulky Wastes and soil and debris from gasoline and oil remediation sites which shall have become non-hazardous may be granted a variance, upon terms and conditions as set forth in the permit issued on this Law and any other established rules of the Chemung County Solid Waste Disposal District, New York State Department of Environmental Conservation, U.S. Environmental Protection Agency or other regulatory authority.

SECTION 6.4-APPLICATIONS FOR PERMITS.

All applicants requesting a permit to discharge the special wastes as defined in Section 6.3 of this Local Law at any Chemung County Solid Waste Facilities shall complete and submit to the General Manager an application provided by the Chemung County Solid Waste Disposal District as a prerequisite for consideration of a special permit. All information required by the Chemung County Solid Waste Disposal District shall be furnished by the applicant in complete cooperation with the General Manager. If

after the issuance of a permit a change in the quantity or change in the characteristics in a permittee's wastes occurs, the permittee shall notify the General Manager in writing. The General Manager and/or the Administrative Board shall make determination as to the validity of the existing permit and the requirements for reapplication for a permit. The information to be furnished by the applicant to the Chemung County Solid Waste Disposal District shall be in accordance with the Rules and Regulations of said Chemung County Solid Waste Disposal District.

SECTION 6.5-TERMS AND CONDITIONS.

The Chemung County Solid Waste Disposal District may impose , through the General Manager certain terms and conditions as part of the permit. These conditions may include but are not limited to the following:

a. Where required, the permittee shall submit self-monitoring reports per a schedule established in the permit. These permits shall be submitted to the General Manager upon request or at the times specified in the permit.

b. A limitation on the quantity of wastes may be in the form of volume or weight, or density.

c. Such other terms and conditions as may be necessary to protect the Chemung County Solid Waste Disposal District facilities and to carry out the intent and provisions of these rules and regulations and environmental guidelines.

d. Subsequent to the commencement of operation, periodic

reports shall be made by the permittee to the General Manager setting forth adequate data upon which the acceptability of the wastes, may be determined. The frequency of these reports will be determined by the General Manager.

e. A violation by the permittee of the conditions may be the cause for immediate revocation or suspension of the permit by the General Manager.

f. Consent by the NYSDEC, USEPA or Chemung County Health Department as requested.

g. Fee for disposal as established by the General Manager as per the guidelines of the Administrative Board.

SECTION 6.6 TRANSFER OF PERMIT.

Discharge permits are issued to a specific User for a specific operation. The permit shall not be transferred to a new owner, new user, or for different premises without specific written approval of the General Manager.

SECTION 6.7-DENIAL OR CANCELLATION OF PERMIT.

The CCSWDD reserves the right to deny, suspend, or cancel any permit.

ARTICLE 7
SURCHARGE

7.1 STANDARDS GOVERNING .

In addition to any other tax, fee, or charge (including bulky wastes) imposed or levied for the construction, maintenance, operation, repair, improvement and management of the County

facilities, any person who has received a permit under Section 6 to discharge Special wastes defined in Section 2.2 shall pay a surcharge for said wastes as provided for in the Rules and Regulations of the Chemung County Solid Waste Disposal District adopted pursuant to Art. 5-A of the County Law.

ARTICLE 8
RECYCLING DIVISION

SECTION 8.1- PURPOSE, POWERS AND ADMINISTRATIVE RESPONSIBILITIES;

a. In the interest of public health, safety, and welfare and in order to conserve energy and natural resources, and to comply with the Solid Waste Management Plan and Policy of the State of New York and Chemung County and to follow the priorities as established in the "Solid Waste Management Act of 1988" as now in effect and as may hereafter be amended, it shall be the duties and responsibilities of the CCSWDD, through its Administrative Board, agent and employees as follows:

1. To create and establish a RECYCLING DIVISION, in order to conserve energy and natural resources and to comply with the Solid Waste Management Plan and Policy of the State of New York and the County of Chemung.

2. To implement, pursue, adopt and promulgate such standards, procedures, rules and regulations, pursuant to Article 5A of the County Law, and as ratified by the Chemung County Legislature for a Recycling Program for the County of Chemung consistent with the Solid Waste Management Act of 1988, and any rules and regulations duly adopted thereunder and as now in effect or as may hereafter be adopted.

3. To appoint a Recycling Manager to carry out the functions and duties as delegated by the Administrative Board and who shall be under the administrative control of the General Manager.

4. To contract with other counties, municipalities, public corporations and improvement districts on recycling of solid waste consistent with the objective and policy under said Solid Waste

Management Law.

5. To apply for any Federal or State grants or assistance for recycling of solid waste.

6. To contract and sell the recyclable material to such persons as defined herein upon written bid submitted to the Recycling Manager and as authorized by the Administrative Board.

7. To perform with other and related acts consistent with this Local Law and the Solid Waste Management Law.

8.2 RECYCLING MANAGER DUTIES AND POWERS.

a. The Recycling Manager shall have the following duties and powers:

(1) To administer the Recycling Program as delegated by the Administrative Board.

(2) Perform such other duties as shall be required of or delegated to said Recycling Manager by the Administrative Board and the General Manager thereof.

ARTICLE 9
VARIANCES

a. The General Manager of the Chemung County Solid Waste Disposal District may, on written application, grant a variance from a specific provision of this Law in a specific case subject to appropriate condition where such variance is in harmony, with the general purpose and intent of this law.

ARTICLE 10
ENFORCEMENT AND PENALTIES

a. All provisions of this law are enforceable by the General Manager of the Chemung County Solid Waste Disposal District; and other appropriate representatives of the County of Chemung.

b. Any person who commits a material violation of any provision

of this law is subject to arrest and punishment as hereinafter provided, if convicted.

c. Whenever the General Manager of the Chemung County Solid Waste Disposal District determines that there has been a violation by virtue of non-compliance, he shall give notice of such violation to the person(s) responsible by personal service or by registered mail, return receipt requested.

1. The citation shall be in writing and shall be properly served.

2. It shall include a statement of reasons and shall allow reasonable time for performance of any act it requires.

3. The citation may contain an outline of remedial action which, if taken, will effect compliance.

4. It shall state that unless corrections are made within the alloted time, suspension and revocation of license and penalties may be imposed.

d. A civil action to abate, enjoin or otherwise compel the cessation of the violation of any provision of this law shall be taken by the Attorney for the Chemung County Solid Waste Disposal District or any other attorney designated by the Administrative Board upon the request of the General Manager.

ARTICLE 11
SEVERABILITY

a. The provisions of this law shall supercede any other local laws heretofore adopted by Chemung County and in conflict

therewith as pertains to Solid Waste Management as stated in this Local Law.

b. If any clause, sentence, paragraph, section or article of this Local Law shall be adjudged by any court of competent jurisdiction to be invalid, such adjudication shall not affect, impair or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, section or article thereof directly involved in the proceeding in which such adjudication shall have been rendered.

c. This Local Law shall be liberally construed to effectuate its objectives and purposes.

ARTICLE 12

SUSPENSION, REVOCATION AND PENALTIES

a. Any license issued by authority of this law shall be revoked and stand revoked, without recourse to a hearing, for the following causes unless such causes are corrected by a licensee within three (3) working days.

1. Cancellation of required insurance.

2. Cancellation or termination of any contract which was the basis for obtaining the license.

b. Any license issued by authority of law may be suspended or revoked by order of the General Manager for the following causes:

1. Conviction by a court of competent jurisdiction of three violations of this law within a twelve(12) month period or two convictions of the same provision of this law within a twelve(12)

month period.

2. Violation of any provision of any state or local law, ordinance, code or regulation which relates directly to the provisions of this law.

3. A violation of any license provision or regulation.

4. The application for the license contained falsehoods.

SECTION 10.2 PENALTIES

a. Any person who violates any provision of this law shall be guilty of a violation, within the meaning of Section 55.10-3 of the Penal Law of the State of New York, and upon conviction thereof, shall be liable to a fine of not less than One Hundred dollars ($100.00) for the first violation, nor less than Three Hundred Dollars ($300.00) for the second violation with subsequent of the same provision, or imprisonment for not more than fifteen(15) days or such fine and imprisonment.

b. Each day of a violation of this law other than a violation thereof constituting an Unclassified Misdemeanor shall constitute a separate and distinct violation.

c. Violation of each single provision of this Law shall constitute a separate and distinct violation.

d. Any penalties levied and/or damages recovered under this Law shall be in addition to any other remedies available under Federal, State or local law and may include a provision to the effect that the violator pay the actual cost to rectify the problem created by the aforesaid violation or improper disposal

of inappropriate wastes.

ARTICLE 13
EFFECTIVE DATE

This local law shall take effect immediately.

(Use this form to file a local law with the Secretary of State.) repealed 2005

Text of law should be given as amended. Do not include matter being eliminated and do not use italics or underlining to indicate new matter.

County
~~City~~
~~Town~~
~~Village~~ of Chemung

Local Law No. 3 of the year 19 96

A local law amending Local Law No. 2 for the Year 1989
(Insert Title)

Be it enacted by the County Legislature of the
(Name of Legislative Body)

County
~~City~~
~~Town~~
~~Village~~ of Chemung as follows:

Section 1. The County of Chemung hereby elects to amend Local Law No. 2 for the Year 1989 by rescinding Section 2.2[1(b.ii)].

Section 2. This act shall take effect December 15, 1996.

(If additional space is needed, attach pages the same size as this sheet, and number each.)

BY ORDER OF THE CHEMUNG COUNTY
LEGISLATURE, COUNTY OF CHEMUNG,
STATE OF NEW YORK

APPROVED BY:

Thomas J. Santulli, Deputy
County Executive
Chemung County, NY

DATED: November 27, 1996

for
G. Thomas Tranter, Jr.
Chemung County Executive
County of Chemung
State of New York

(Complete the certification in the paragraph that applies to the filing of this local law and strike out that which is not applicable.)

1. (Final adoption by local legislative body only.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 19___ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 19___, in accordance with the applicable provisions of law.
(Name of Legislative Body)

2. (Passage by local legislative body with approval, no disapproval or repassage after disapproval by the Elective Chief Executive Officer*.)

I hereby certify that the local law annexed hereto, designated as local law No. 3 of 1996 of the (County)(~~City~~)(~~Town~~)(~~Village~~) of Chemung was duly passed by the County Legislature on November 11 19 96 and was (approved)(~~not disapproved~~)(~~repassed after disapproval~~) by the County Executive and was deemed duly adopted on November 27 1996, in accordance with the applicable provisions of law.
(Name of Legislative Body) (Elective Chief Executive Officer*)

3. (Final adoption by referendum.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 19___ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 19___, and was (approved)(not disapproved)(repassed after disapproval) by the _____ on _____ 19___. Such local law was submitted to the people by reason of a (mandatory)(permissive) referendum, and received the affirmative vote of a majority of the qualified electors voting thereon at the (general)(special)(annual) election held on _____ 19___, in accordance with the applicable provisions of law.
(Name of Legislative Body) (Elective Chief Executive Officer*)

4. (Subject to permissive referendum and final adoption because no valid petition was filed requesting referndum.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 19___ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 19___, and was (approved)(not disapproved)(repassed after disapproval) by the _____ on _____ 19___. Such local law was subject to permissive referendum and no valid petition requesting such referendum was filed as of _____ 19___, in accordance with the applicable provisions of law.
(Name of Legislative Body) (Elective Chief Executive Officer*)

***Elective Chief Executive Officer means or includes the chief executive officer of a county elected on a county-wide basis or, if there be none, the chairman of the county legislative body, the mayor of a city or village, or the supervisor of a town where such officer is vested with the power to approve or veto local laws or ordinances.**

5. (City local law concerning Charter revision proposed by petition.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 19___ of the City of _____ having been submitted to referendum pursuant to the provisions of section (36)(37) of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of such city voting thereon at the (special)(general) election held on _____ 19___, became operative.

6. (County local law concerning adoption of Charter.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 19___ of the County of _____, State of New York, having been submitted to the electors at the General Election of November _____ 19___, pursuant to subdivisions 5 and 7 of section 33 of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of the cities of said county as a unit and of a majority of the qualified electors of the towns of said county considered as a unit voting at said general election, became operative.

(If any other authorized form of final adoption has been followed, please provide an appropriate certification.)

I further certify that I have compared the preceding local law with the original on file in this office and that the same is a correct transcript therefrom and of the whole of such original local law, and was finally adopted in the manner indicated in paragraph 2, above.

_____
Clerk of the County legislative body, City, Town or Village Clerk or officer designated by local legislative body

(Seal)

Date: November 27, 1996

(Certification to be executed by County Attorney, Corporation Counsel, Town Attorney, Village Attorney or other authorized Attorney of locality.)

STATE OF NEW YORK
COUNTY OF Chemung

I, the undersigned, hereby certify that the foregoing local law contains the correct text and that all proper proceedings have been had or taken for the enactment of the local law annexed hereto.

_____
Signature

Ransom Reynolds, Jr.
County Attorney
Title

County
City
Town
Village
of Chemung

Date: November 27, 1996

(Use this form to file a local law with the Secretary of State.)

Text of law should be given as amended. Do not include matter being eliminated and do not use italics or underlining to indicate new matter.

County
~~City~~
~~Town~~ of CHEMUNG
~~Village~~

Local Law No. 4 of the year 1996

A local law Chemung County Solid Waste Management District Separation and (Insert Title) Segregation of Recyclables or Reusable Material Law

Be it enacted by the LEGISLATURE of the (Name of Legislative Body)

County
~~City~~
~~Town~~ of CHEMUNG as follows:

ARTICLE I

TITLE AND AUTHORITY

SECTION 1.1 - SHORT TITLE

This law shall be known as the "Chemung County Solid Waste Management District Separation and Segregation of Recyclables or Reusable Material Law".

SECTION 1.2 - EMPOWERING LEGISLATION

The Chemung County Solid Waste Management District Separation and Segregation of Recyclables or Reusable Material Law is enacted pursuant to Section 120aa of the General Municipal Law.

ARTICLE II

PURPOSE AND INTERPRETATION

SECTION 2.1 - DECLARATION OF POLICY

The purpose of this law is to empower the County of Chemung, through the Administrative Board of the Chemung County Solid Waste Management District (District) to require that solid waste which has been left for collection of which is delivered by the generator of such waste to a solid waste management facility, shall be separated into recyclable, reusable or other components for which an economic market for alternate uses exits and to regulate the disposal of solid waste generated in the County of Chemung by the establishment of certain standards, regulations, rules and procedures as set forth herein, for the protection of the public health, safety and welfare and for the enhancement of the environment.

(If additional space is needed, attach pages the same size as this sheet, and number each.)

The Chemung County Legislature (Legislature) recognizes that the well ordered management of solid waste at the County level of government will provide the most safe, sanitary, environmentally sound, and feasible manner of responding to the solid waste problems in the County of Chemung pursuant to the various laws, rules and regulations applicable to the enhancement of the environment.

The Legislature further recognizes that a need exists within the County of Chemung for the County to assume a larger role in managing the solid waste problems of the City, Towns and Villages located in the County. The City, Towns and Villages of the County have become less able to effectively manage their solid waste problems due to the increasing amounts of solid waste generated, the rising costs of solid waste disposal and the increasing of environmental and regulatory controls thereof.

This Local Law seeks to provide a County-wide program for the source, separation and segregation of recyclables or reusable materials in cooperation with the federal, state regional and local agencies charged with the responsibility thereof.

SECTION 2.2 DEFINITIONS

1. "Recover" means any act or process by which recyclables or reusable materials are separated from the solid waste stream.

2. "Recyclable" means solid waste that exhibits the potential to be used repeatedly in place of a virgin material. For purpose of this Section, they shall include paper, glass, metals, plastic, gardening and yard wastes and may include other elements of solid waste.

3. "Recycle" means to use recyclables in place of virgin materials in manufacturing a product.

4. "Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

5. "Municipality" means a county, village, town, city, any designated agency thereof, a solid waste management district, a public benefit corporation having power granted otherwise than under ECL Article 51 to construct, operate, and maintain a solid waste management facility, including a public corporation created pursuant to agreement or compact with another state, or any combination thereof.

6. "Person" means any individual, public or private corporation, political subdivision, government agency, authority, department or bureau of the State of New York, municipality, industry, copartnership, association, firm, trust, estate, or any other legal entity whatsoever.

7. "Refuse" means anything putrescible or nonputrescible that is discarded or rejected as useless or worthless.

8. "Solid Waste Hauler" includes any person who collects, transports or disposes of solid waste or recyclables to facilities owned or operated by the District.

9. "Solid Waste Management Facility" means any facility employed beyond the initial solid waste collection process and managing solid waste including, but not limited to: storage areas or facilities; transfer stations; rail-haul or barge-haul facilities; landfills; disposal facilities; solid waste incinerators; land spreading facilities; composting facilities; surface impoundments; and waste oil storage, reprocessing, refining facilities, recyclables handling and recovery facilities, and waste tire storage facilities.

10. "Source Separation" means dividing solid waste into some or all of its component parts at the point of generation.

11. "Economic Markets" refers to those instances in which the full avoided costs of proper collection, transportation, and disposal of source separated material are equal to or greater than the costs of collection, transportation and sale of the material less the amount received from the sale of the material.

12. "Aluminum Container" shall mean uncrushed aluminum cans and folded aluminum foil and trays.

13. "Corrugated Cardboard" shall mean flattened untied cardboard of two layers separated by a ribbed section.

14. "Glass Containers" shall mean unbroken, clear, brown and green glass bottles and jars.

15. "Junk Mail" shall mean envelopes, glossy or colored paper, manila folders, post-it-notes, facsimile paper, NCR paper and envelopes with labels.

16. "Magazines" shall mean untied, dry magazines and catalogs.

17. "Metal Containers" shall mean uncrushed metal food (including pet food) cans.

18. "Newspapers" shall mean untied, dry newsprint and all newspaper supplements.

19. "Office Paper" shall mean loose or shredded white tablet paper, typing paper, index cards, computer paper, white letterhead, adding machine tapes, white copy paper, white ledger sheets and tabulating cards.

ARTICLE III

ADMINISTRATION

SECTION 3.1 FUNCTION, POWERS AND ADMINISTRATIVE RESPONSIBILITIES

The duties and responsibilities of the District and its Administrative Board shall include but not be limited to the following:

1. To exercise all powers and duties as an Administrative Unit of County Government for solid waste management in Chemung County and to perform such other functions as the Chemung County Legislature will from time to time direct or delegate.

2. To carry out its duties in accordance with all applicable laws, rules and regulations pertaining to solid waste management.

3. To authorize the General Manager and/or his designee to investigate all violations and grievances reported hereunder.

4. To initiate any action against any person as provided herein.

5. To have notices and citations and violations issued under this local law and to direct its attorney to prosecute violations of this local law.

ARTICLE IV

RECYCLABLES

Section 4.1 Recyclables shall be deposited at solid waste management facilities owned or operated by the District. Such recyclables shall be prepared according to District specifications.

The following recyclables for which economic markets exist shall be source separated as follows: (i) corrugated cardboard, (ii) office paper, (iii) newspapers and magazines, (iv) junk mail, (v) glass, plastic, metal and aluminum containers, (vi) leaves and grass clippings.

Section 4.2 Prior to placement curbside for collection and removal, glass, plastic, metal and aluminum containers shall be clean, and all contents shall be removed therefrom, caps shall be removed from glass and plastic containers, paper labels shall be removed from metal containers, and metal lids shall be placed inside metal cans. Recyclables shall be placed loosely inside the recycling container (provided by District) with newspapers and magazines placed on top of the container.

Section 4.3 Recyclables shall not be placed in the same container as or otherwise mixed with other forms of solid waste. The District shall reject loads of solid waste commingled with recyclables or loads of recyclables commingled with solid waste.

Section 4.4 The dates for collection of recyclables shall be determined by the solid waste hauler.

Section 4.5 All persons who wish to drop-off recyclables at solid waste management facilities of the District shall separate the recyclables and dispose of them in separate containers that will be made available at such facilities. Once deposited in the containers provided at such facilities, all recyclables become the property of the District.

ARTICLE V

VARIANCES

Section 5.1 The General Manager of the District may, upon written request, grant a variance from a specific provision of this Local Law. Requests for variances shall be considered on a case by case basis.

Variances may be granted upon a demonstration by the person requesting the variance that (i) compliance with this Local Law or the regulations promulgated hereunder, in whole or in part, would, on the basis of conditions unique to the person's particular situation, impose an unreasonable economic, technological or safety burden on the person and (ii) that the requested variance is in harmony with the general objectives and purposes of this Local Law.

ARTICLE VI

ENFORCEMENT AND PENALTIES

Section 6.1 All provisions of this Local Law are enforceable by the General manager of the District and other appropriate representatives of the County of Chemung or their designees.

Section 6.2 Whenever the General Manager of the District or his designee determines that there has been a violation of this Local Law, he shall give notice of such violation to the alleged violator(s) by personal service or by certified mail, return receipt requested. The Notice shall be in writing and shall include a statement of the violation and a time frame within which the violation shall be corrected. The notice shall also state that, if the violator has been issued a registration hereunder, unless the violation is corrected within the allotted time, suspension and revocation of registration may result, along with the imposition of penalties.

The notice may also set forth an outline of remedial action which, if undertaken, will effectuate compliance.

Section 6.3 Any person who commits a violation of any provision of this Local Law, or any regulation promulgated hereunder, or whose actions result in a violation of the terms of any consent order, shall be subject to arrest and punishment, if convicted, as hereinafter provided:

1. First offense: conviction of a first offense shall be punishable by a fine of not less than $100.00 nor more than $500.00, and/or a term of imprisonment not to exceed fifteen days, together with restitution based on avoided disposal fees and cost of collection and hauling and/or community service.

2. Second or subsequent offense: conviction of a second or subsequent offense within a year of the first offense shall be punishable by a fine of not less than $500.00 nor more than $1,000.00, and/or a term of imprisonment not to exceed six months, together with restitution based on avoided disposal fees and costs of collection and hauling, and/or community service.

3. Conviction of any company, partnership, municipality or any entity other than an individual person shall be subject to a fine not less than $500.00 nor more than $2,500.00 and/or community services.

4. Violation of this Local Law or a regulation promulgated hereunder shall be a misdemeanor as defined in Section 55.10(2) of the Penal Law of the State of New York.

Section 6.4 Each day during which a violation of this Local Law continues shall be deemed to be a separate violation.

Section 6.5 Enforcement shall be effected as follows:

1. by a peace officer or police officer as provided by the Criminal Procedure Law of the State of New York;

2. by the General Manager of the District or his designee by issuance of an appearance ticket pursuant to Article 150 of the Criminal Procedure Law of the State of New York.

Section 6.6 Civil Enforcement:

Notwithstanding the penalties set forth above, the attorney for the District or any other attorney designated by the Administrative Board upon the request of the General Manager, may institute a civil action to obtain restitution to the County of Chemung from such offender for the actual costs incurred in removing or arranging for the removal of solid waste or providing remedial action relating to solid waste, or to abate, enjoin or otherwise compel cessation of the violation of any provision of this Local Law.

Section 6.7 Disposition of Fines:

Any fines collected hereunder shall be payable to the District.

ARTICLE VII

This Local Law shall take effect January 1, 1997.

BY ORDER OF THE CHEMUNG COUNTY LEGISLATURE, COUNTY OF CHEMUNG, STATE OF NEW YORK

APPROVED BY:

DATED: December 19, 1996

G. Thomas Tranter, Jr.
Chemung County Executive
County of Chemung
State of New York

(Complete the certification in the paragraph that applies to the filing of this local law and strike out that which is not applicable.)

1. (Final adoption by local legislative body only.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 19___ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 19___, in accordance with the applicable provisions of law.
(Name of Legislative Body)

2. (Passage by local legislative body with approval, no disapproval or repassage after disapproval by the Elective Chief Executive Officer*.)

I hereby certify that the local law annexed hereto, designated as local law No. 4 of 1996 of the (County)(City)(Town)(Village) of Chemung was duly passed by the County Legislature on December 9 1996, and was (approved)(not disapproved)(repassed after
(Name of Legislative Body)

disapproval) by the County Executive and was deemed duly adopted on December 19 96.
(Elective Chief Executive Officer*)

in accordance with the applicable provisions of law.

3. (Final adoption by referendum.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 19___ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 19___, and was (approved)(not disapproved)(repassed after
(Name of Legislative Body)

disapproval) by the _____ on _____ 19___. Such local law was
(Elective Chief Executive Officer*)

submitted to the people by reason of a (mandatory)(permissive) referendum, and received the affirmative vote of a majority of the qualified electors voting thereon at the (general)(special)(annual) election held on _____ 19___, in accordance with the applicable provisions of law.

4. (Subject to permissive referendum and final adoption because no valid petition was filed requesting referndum.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 19___ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 19___, and was (approved)(not disapproved)(repassed after
(Name of Legislative Body)

disapproval) by the _____ on _____ 19___. Such local law was subject to
(Elective Chief Executive Officer*)

permissive referendum and no valid petition requesting such referendum was filed as of _____ 19___. in accordance with the applicable provisions of law.

***Elective Chief Executive Officer means or includes the chief executive officer of a county elected on a county-wide basis or, if there be none, the chairman of the county legislative body, the mayor of a city or village, or the supervisor of a town where such officer is vested with the power to approve or veto local laws or ordinances.**

5. (City local law concerning Charter revision proposed by petition.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 19___ of the City of _____ having been submitted to referendum pursuant to the provisions of section (36)(37) of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of such city voting thereon at the (special)(general) election held on _____ 19___, became operative.

6. (County local law concerning adoption of Charter.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 19___ of the County of _____, State of New York, having been submitted to the electors at the General Election of November _____ 19___, pursuant to subdivisions 5 and 7 of section 33 of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of the cities of said county as a unit and of a majority of the qualified electors of the towns of said county considered as a unit voting at said general election, became operative.

(If any other authorized form of final adoption has been followed, please provide an appropriate certification.

I further certify that I have compared the preceding local law with the original on file in this office and that the same is a correct transcript therefrom and of the whole of such original local law, and was finally adopted in the manner indicated in paragraph 2, above.

_____
Clerk of the County legislative body, ~~City, Town or Village Clerk or officer designated by local legislative body~~

(Seal)

Date: December 19, 1996

(Certification to be executed by County Attorney, Corporation Counsel, Town Attorney, Village Attorney or other authorized Attorney of locality.)

STATE OF NEW YORK
COUNTY OF Chemung

I, the undersigned, hereby certify that the foregoing local law contains the correct text and that all proper proceedings have been had or taken for the enactment of the local law annexed hereto.

_____
Signature

Ransom Reynolds, Jr.
County Attorney
Title

County
City
Town of Chemung
Village

Date: December 19, 1996

Appendix C

Municipal Programs and Reports

NON-HAZARDOUS SOLID WASTE COLLECTION			
Casella Waste Services 796-2000	Foster's Disposal 734-2502	Jim's Trucking 734-9745	B&E (866) 263-3306
CONTAINER / DUMPSTER RENTAL			
Casella Waste Services 796-2000	Foster's Disposal 734-2502	Swartout Recycling 936-0013	Shulman Co. 733-7111
HAZARDOUS WASTE / USED FLUID DISPOSAL			
Op-Tech 565-8891	Clean Harbors (800) 444-4244	Safety-Kleen (585) 226-2411	Hazelton Oil (570) 454-3464
FREON CONTAINING APPLIANCES			
Swartout Recycling 936-0013	Foster's Disposal 734-2502	Fix Rite 733-3195	
FLOURESCENT LIGHT TUBES / BALLASTS			
Op-Tech 585-8891	Clean Harbors (800) 444-4244	Safety-Kleen (585) 226-2411	
CONTAMINATED SOIL DISPOSAL & INDUSTRIAL WASTE DISPOSAL/PROCESSING			
Casella Waste Services 796-2000	Beaver's Petroleum 739-1790	Sheesley's Sewer Service 733-1862	
USED MOTOR/ HYDRAULIC / TRANSMISSION OILS & AUTOMOTIVE BATTERIES			
Tractor Supply 739-6380	NYS Law requires these materials be accepted at local services stations and garages for disposal /recycling		
ELECTRONICS RECYCLING			
Chemung Transfer Station 737-2820	REACT eCycling 739-8401		
TIRE RECYCLING			
Paramenter Tire & Service 739-3642	Chemung Transfer Station 737-2820	Annual County Collection Event 739-2009	
USED COOKING OIL RECYCLING			
Southern Tier Hide and Tallow 734-2661	Baker Commodities (315) 458-4901		
PROPANE TANKS			
Suburban Propane 739-4141			
SCRAP METAL (FIRE EXTINGUISHERS)			
Kaplan's Scrapyard Inc. 733-6531	W.M. Spiegel & Sons 733-5033	Shulman Co. 733-7111	
PAPER SHREDDING SERVICES			
Southern Tier Industries 734-6151	Cintas (570) 708-1115		
DEAD ANIMAL PROCESSING			
Southern Tier Hide & Tallow 734-3661			

TO REPORT SPILLS CALL:

NYSDEC Spill Response
(800)457-7362

Chemung County Emergency Management
737-2096

TO REPORT ILLEGAL DUMPING CALL:

Sheriff's Office
735-8600

Environmental Health Department
737-2019

Household Hazardous Waste (HHW)

Two HHW Collection events are funded by Casella in the Spring and Fall of each year.
Household chemicals, cleaners, solvents, paints, pesticides, herbicides, light bulbs, batteries etc. will be accepted free of charge to County Residents.

Contact Cornell Cooperative Extension to pre-register.
734-4453

Landfill Rules and Instructions

At the Chemung Landfill LLC, we strive to make our operation an efficient one so our customers and their equipment can deliver waste without delay or incident. To help us help you, we provide the following instructions and rules:

1) Operating Hours
Monday – Friday 7:00 am – 3:30pm

2) Banned Waste - Not Accepted at this Facility
a) Hazardous Waste as defined by Federal, State and Local Regulations.
b) Biomedical Waste
c) Radioactive Waste
d) Regulated PCB Waste
e) Liquid Waste defined as waste containing less than 20% solids or waste not passing the paint filter test.
f) Landscape and Yard waste, will be accepted through December 2005.
g) Whole tires – tires can be accepted if, cut to remove both sidewalls, cut in half circumferentially or chipped.
h) Industrial waste which has not been pre-approved
i) Lead acid batteries
j) White goods (anything containing Freon)
k) Large animal carcasses

3) Waste that Must be Pre-approved Prior to Delivery
a) Industrial Waste
b) Asbestos Waste
c) Contaminated Soil
d) Off-spec Products
e) Ash – MSW or otherwise

4) Scale House Procedures
a) All loads are subject to inspection!
b) Drivers should be ready to explain to the scale person, what kind of waste they are hauling and where it came from.
c) Drivers should have and provide to the scale person all required paperwork, approvals or manifest associated with the load
d) Drivers should have CB radios and on channel 3 as they approach the facility.
e) DO NOT USE JAKE BRAKES while on site.
f) You will need pre-approval for credit. Check and cash can be accepted at the scales.

5) On-Site Rules
a) All drivers/helpers must put Safety first while at the site.
b) All safety rules must be strictly followed.
c) NO SMOKING
d) At a minimum, anyone outside of a vehicle must wear a hard hat and have appropriate foot wear.
e) All loads entering the site must be tarped. Untarping should only occur in designated areas.
f) Stuck or disabled vehicles will be pulled to an appropriate location. Drivers must hook the chain or cable to their vehicle. Chemung Landfill will not be responsible for damage as a result.
g) No guns, weapons, drugs, alcohol or unprofessional behavior will be tolerated on site.
h) In case of emergency, drivers and customers should first remove themselves from danger. Then report/contact site personnel for further instructions.

We hope these rule will aid both the customer and landfill staff be as safe and efficient as can be.

Click here to download a printable version of these rules.

We hope this information is helpful in making your deliveries to our facilities as smooth as possible.

Instructions for each Disposal Location: As you locate the item you are looking for, the Disposal Location will indicate where it is to be taken. The instructions for delivery are outlined below. All open loads must be tarped and tied down.

GENERAL SCALE INSTRUCTIONS: Drive onto the scale when there is no other vehicle on the scale. The scale attendant will ask what type of materials you are delivering. Advise if it is C&D (construction & demolition materials), MSW (general garbage), MIXED (C&D plus MSW) or Recyclables. Let the attendant know if are paying by cash or check, or if you have an account. All loads must be fully tarped. Un-tarped loads will be rejected.

"LANDFILL": Located in Lowman, just off Route 17/86, two miles east of the Wellsburg / Lowman exit. Deliver all materials by the load. Enter in the gate marked "Landfill". Drive up the hill to the Scale Trailer & check in with the scale operator. The scale operator will instruct you on how to proceed from there. When you enter the dumping area, the attendant will instruct you on where to unload your refuse. After unloading, proceed back to the scales to check out and sign your weigh ticket. Please call 529-3204 for ACCESSIBILITY Due to Mud and Deep Ruts in dumping area

"Lake St. Scales": Located at 1690 Lake Street, Elmira, 2.8 miles south of the Horseheads intersection of South Main St. and Route 17/86. Deliver all materials by the load. Proceed to right side of Building #1 and check in with the scale operator. The scale operator will instruct you on how to proceed from there. When you enter the dumping area, the attendant will instruct you on where to unload your refuse. After unloading, proceed back to the scales to check out and sign your weigh ticket.

GENERAL Drop Off Station (DOS) INSTRUCTIONS: The DOS sites are for the disposal of bagged residential garbage and residential recyclables only. Large amounts of these items must be taken to our Lake Street scales for disposal. Please use caution when driving into the DOS as there will be pedestrians in the unloading area and at the Booth. Unload your garbage, fully enclosed in our specially marked bags, in the container marked for garbage. Those bags are available for $4.00 each at the DOS Booth window. That fee covers the disposal cost. Unload your recyclables in the container marked for recyclables. Direct any questions to the attendant at the booth.

Lake St. "DOS" at Bldg. #3: Located at 1690 Lake Street, Elmira, 2.8 miles south of the Horseheads intersection of South Main St. and Route 17/86. Deliver 7 or fewer bags of trash, 'contained' home-use syringes and household amounts of recyclables. Place bagged trash in the large window openings in the large green building. Place recyclables in the dumpster container. Hand the syringe container to the attendant.

Any "DOS": Deliver 7 or fewer bags of trash and household amounts of recyclables via any one of our five Drop-Off Stations. (Institution Rd. in Southport, Swartwood Rd. in Erin, Chambers Rd. in Big Flats, Co. Rt. 64 in Lowman or Lake St. in Elmira).

Any Recycle/DOS: Deliver large loads of recyclable materials to the Lake Street scales, or any small load to any of DOS sites. (Institution Rd. in Southport, Swartwood Rd. in Erin, Chambers Rd. in Big Flats, Co. Rt. 64 in Lowman or Lake St. in Elmira).

"We Do NOT Accept": Items marked with this note are usually hazardous materials that we either cannot or do not accept and they have other disposal options. Some local haulers accept these materials. Op-Tech in Waverly (607-565-8891) is another option. The Annual Household Hazardous Waste Collection Day is available for Residents (not businesses), who may dispose of some of these items by calling the Cornell Cooperative Extensive office (734-4453) to register for participation in the event. See the notes in the Preparation column for other pertinent information. Call our office if you have questions.

All Loads must be fully Tarped and/or Contained in Vehicle

Items are listed in alphabetical order. Items are sometimes listed under two different names, such as "automobile" and "car". If you can't locate the item you are looking for, try a different word that would describe the same thing...for example, you won't find "lawn furniture" but you will find "furniture", "aluminum", "metal" and "plastic".

Material	Disposal Location	Preparation / Rate / Misc Info
Acids (liquid or powder)	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Aerosol cans, spray paint cans	Lake St. Scales or any DOS	Must be empty; only one per garbage bag
Air conditioners	**We Do NOT Accept**	Ask for list of Waste Service Providers.
Aluminum Cans	Any Recycle/DOS	Loose or in brown paper bags
Aluminum chairs/scrap pieces)	Lake St. Scales	MSW Rate
Aluminum Siding	Lake St. Scales	C&D Rate
Aluminum siding mixed with C&D	Lake St. Scales	C&D Rate
Ammunition, bullets	**We Do NOT Accept**	Call your local law enforcement agency
Animal droppings (manure)	LANDFILL	LANDFILL C&D Rate
Animals, dead	LANDFILL	$5.00 each
Antifreeze	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Appliances (except Freon type)	Lake St. Scales	Must NEVER have even contained FREON
Asbestos (Friable)	**We Do NOT Accept**	Try Steuben County, (607) 776-9631
Ash, Industrial	LANDFILL	Call for info on required testing & prior approval.
Ash, Residential, Loose (burn barrel or fireplace cleanings)	Lake St. Scales	MUST be COLD!
Automobile batteries	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Automobile parts, fiberglass	Lake St. Scales	MSW Rate
Automobile parts, metal	Lake St. Scales	May NOT have any liquids in it at all. Gas tanks must have at least one hole cut/drilled in it.
Automobile parts, plastic or seats	Lake St. Scales	MSW Rate
Ballasts, from light fixtures	**We Do NOT Accept**	Ask for list of Waste Service Providers.
Bathtub, fiberglass or plastic	Lake St. Scales	C&D Rate
Bathtub, porcelain, enamel, metal	Lake St. Scales	MSW Rate

Batteries, Car	**We Do NOT Accept**	Try local scrap yards or call for Household Hazardous Waste Day **Call 734-4453**
Batteries, household, cell phone	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Beds, metal	Lake St. Scales	MSW Rate
Beds, wood	Lake St. Scales	C&D Rate
Bicycles	Lake St. Scales	MSW Rate
Boats, fiberglass or plastic	Lake St. Scales	C&D Rate
Boats, wood	Lake St. Scales	C&D Rate
Books, hardcover NOT removed	Lake St. Scales or any DOS	MSW Rate
Books, hardcover removed	Any Recycle/DOS	The hardcover is trash; the pages are recyclable.
Books, paperback	Any Recycle/DOS	
Bowling ball	Lake St. Scales	MSW Rate
Brass	Lake St. Scales	MSW Rate
Bricks	Lake St. Scales	MSW Rate
Brush, branches	We do not accept	Check with Town for Yard Waste Program.
Building felt	Lake St. Scales	C&D Rate
Burn Barrels	**We Do NOT Accept**	
Cabinets, metal or wood	Lake St. Scales	MSW Rate
Cap, Truck fiberglass or wood	Lake St. Scales	C&D Rate
Cap, Truck metal	Lake St. Scales	MSW Rate
Car batteries	**We Do NOT Accept**	Try local scrap yards or call for Household Hazardous Waste Day **Call 734-4453**
Car parts, fiberglass	Lake St. Scales	MSW Rate
Car parts, metal	Lake St. Scales	May NOT have any liquids in it at all. Gas tanks must have at least one hole cut/drilled in it.
Car parts, plastic or seats	Lake St. Scales	MSW Rate
Cardboard, corrugated	Any Recycle/DOS	Clean/Dry is recyclable. Soiled/wet is garbage.
Cardboard, single layer (like cereal boxes, shoe boxes, etc.)	Any Recycle/DOS	Clean/Dry is recyclable. Soiled/wet is garbage.
Carpet	Lake St. Scales or any DOS	MSW Rate
Cast Iron	Lake St. Scales	MSW Rate
Ceiling Tiles	Lake St. Scales	C&D Rate
Ceramics (plates, windows, mugs)	Lake St. Scales	MSW Rate
Chairs Metal or Plastic	Lake St. Scales	MSW Rate
Chairs Stuffed	Lake St. Scales	$15.00 Each @ Lake St
Chairs Wooden	Lake St. Scales	C&D Rate
Chemicals	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Christmas Trees	**We Do NOT Accept**	Check with Town for Yard Waste Program.
Clothing - Clean Useable	**Please Donate**	
Clothing - Unusable	Lake St. Scales	MSW Rate

Computers	Lake St. Scales	No Charge. Must be intact. No broken e-waste accepted.
Concrete	Lake St. Scales	C&D Rate
Concrete Block	Lake St. Scales	C&D Rate
Conduit (Metal Pipe)	Lake St. Scales	MSW Rate
Conduit (PVC Pipe)	Lake St. Scales	C&D Rate
Construction Material	Lake St. Scales	C&D Rate
Contaminated Soil	LANDFILL	Call for info on required testing & prior approval.
Copper	Lake St. Scales	MSW Rate
Copy Machines	Lake St. Scales	MSW Rate
Couch/Davenport	Lake St. Scales	$15.00 Each @ Lake St
Cylinders - SEE TANKS		
Dehumidifiers	**We Do NOT Accept**	A List of Special Waste Haulers is available.
Demolition Material	Lake St. Scales	C&D Rate
Desks,	Lake St. Scales	C&D Rate if Wood MSW Rate if Metal
Dirt	LANDFILL	Call for info on required testing & prior approval.
Dishes	Lake St. Scales or any DOS	MSW Rate
Doors	Lake St. Scales	C&D Rate if Wood MSW Rate if Metal
Dressers, Wood	Lake St. Scales	C&D Rate
Driveway Sealers, Floor Adhesive	Lake St. Scales	Accepted only if hardened or completely dried
Drums, Metal i.e. 55 gal.	LANDFILL	MSW Rate Both ends must be removed. Call for approval prior to disposal
Drums, Plastic i.e. 55 gal.	LANDFILL	MSW Rate Both ends must be Removed. Call for approval prior to disposal
Dryers	Lake St. Scales	MSW Rate
Duct Work, Metal	Lake St. Scales	MSW Rate
Eave troughs Metal or Plastic	Lake St. Scales	MSW Rate
Felt, building felt	Lake St. Scales	C&D Rate
Fence, Metal	Lake St. Scales	MSW Rate
Fence, Wood or Snow	Lake St. Scales	C&D Rate
Fenders, auto fiberglass	Lake St. Scales	C&D Rate
Fenders, auto metal	Lake St. Scales	MSW Rate
Fertilizers (powder or liquid)	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Fiberglass Any	Lake St. Scales	C&D Rate
Filters, large, with metal	Lake St. Scales	MSW Rate
Fire Extinguishers	**We Do NOT Accept**	Try local scrap yards
Floor Tile Asbestos	**We Do NOT Accept**	Try Steuben County, (607) 776-9631
Floor Tile, Linoleum	Lake St. Scales	C&D Rate
Fluorescent Bulbs Green Ends	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453** or Lowes
Fluorescent Bulbs Other	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453** or Lowes
Fluorescent Fixture Ballasts	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Fluorescent Fixtures - Metal	Lake St. Scales	MSW Rate; free of ballasts & bulbs
Food Waste	Lake St. Scales or any DOS	MSW Rate

Freezers	**We Do NOT Accept**	Ask for list of Waste Service Providers.
Freon Tanks-Anything Containing	**We Do NOT Accept**	Ask for list of Waste Service Providers.
Furnaces	Lake St. Scales	MSW Rate
Furniture, Wicker/Wooden	Lake St. Scales	C&D Rate
Gas Contaminated Soil	LANDFILL	Call for info on required testing & prior approval.
Gas Cylinders (gas grill type)	**Check With Gas**	
Gas Cylinders Large Commercial	**Check With Gas**	
Gas Cylinders Small < 3 lb	**Check With Gas**	
Gas Tanks Auto (no gas or liquids)	Lake St. Scales	MSW Rate; needs 1 large or 2 small holes in it
Gasoline, Fuel, Kerosene	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Glass Bottles, whole	Any Recycle/DOS	Any Recycle/DOS Station
Glass Plate, Window Glass	Lake St. Scales	MSW Rate
Glass Windshields	Lake St. Scales	MSW Rate
Glues, Adhesive - hardened up	Lake St. Scales	MSW Rate
Grass/Leaves	**We Do NOT Accept**	Check with Town for Yard Waste Program.
Grills, Metal	Lake St. Scales	MSW Rate
Gutters, Metal	Lake St. Scales	MSW Rate
Gutters, Plastic	Lake St. Scales	C&D Rate
Hangers, Metal or Plastic	Lake St. Scales or any DOS	MSW Rate
Hazardous Waste	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Hose (Garden)	Lake St. Scales or any DOS	MSW Rate
Hose (Metal with rubber/plastic)	Lake St. Scales or any DOS	MSW Rate
Hot Water Tanks	Lake St. Scales	MSW Rate
Hub Caps (metal or plastic)	Lake St. Scales	MSW Rate
Insulation Loose	Lake St. Scales	C&D Rate
Insulation, foam board, sheets	Lake St. Scales	C&D Rate
Insulators, ceramic, electric	Lake St. Scales	MSW Rate
Iron	Lake St. Scales	MSW Rate
Junk Mail	Any Recycle/DOS	Any Recycle/DOS Station
Kitchen Counter Tops (wood & Formica)	Lake St. Scales	C&D Rate
Kitchen Counter Tops (wood & sink)	Lake St. Scales	C&D Rate
Ladders, Metal	Lake St. Scales	MSW Rate
Ladders, Wooden	Lake St. Scales	C&D Rate
Lath, Metal	Lake St. Scales	MSW Rate
Lath, Wooden	Lake St. Scales	C&D Rate
Lawn Chairs Metal	Lake St. Scales	MSW Rate
Lawn Mowers, rider or push	Lake St. Scales	MSW Rate; free of all liquids
Leaves	**We Do NOT Accept**	Check with Town for Yard Waste Program.
License Plates	Lake St. Scales	Any Recycle/DOS Station

Light Fixtures, Metal or Plastic	Lake St. Scales	MSW Rate; free of ballasts & bulbs
Linoleum	Lake St. Scales	C&D Rate
Liquids	**We Do NOT Accept**	Ask for list of Waste Disposal Options.
Magazines	Any Recycle/DOS	Any Recycle/DOS Station
Mail Boxes with Concrete Base	Lake St. Scales	C&D Rate
Mail Boxes, Metal or Plastic	Lake St. Scales	MSW Rate
Manure, Animal Waste	LANDFILL	LANDFILL C&D Rate
Mattresses	Lake St. Scales	$15.00 Each @ Lake St
Medical Waste: medications, pills & syrups	**Check with your**	
Mercury Liquid	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Metal	Lake St. Scales	MSW Rate
Metal Bed Frames	Lake St. Scales	MSW Rate
Metal Plumbing	Lake St. Scales	MSW Rate
Microwave Oven	Lake St. Scales	MSW Rate
Monitors, Computer	Lake St. Scales	$15.00 Each @ Lake St
Motors, Electrical	Lake St. Scales	MSW Rate
Needles, Medical (from home use)	**We Do NOT Accept**	Any individual looking to dispose of these types of materials should call their local doctor's office or hospital. Additionally, Stericycle offers a household mailback option and may hold collection events in the area. For more information go to their website: http://www.stericycle.com/consumer-needle-disposal
Newspapers	Any Recycle/DOS	Any Recycle/DOS Station
Nuts, bolts, nails	Lake St. Scales	MSW Rate
Office Paper	Any Recycle/DOS	Any Recycle/DOS Station
Oil Filters	**We Do NOT Accept**	Check local auto parts store
Oil Soaked Soil	LANDFILL	Call for info on required testing & prior approval.
Oil, Cooking	**We Do NOT Accept**	Local Rendering Company
Oil, motor	**We Do NOT Accept**	Check local auto parts store
Pails, Metal or Plastic	Lake St. Scales	MSW Rate
Paint Cans Empty & Dry	Lake St. Scales	MSW Rate
Paint Thinner	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Paint, (hardened)	Lake St. Scales	MSW Rate
Pallets, Wooden	Lake St. Scales	C&D Rate
Paper, Grease contaminated	Lake St. Scales	MSW Rate
Paper, Office paper, Junk Mail	Any Recycle/DOS	Any Recycle/DOS Station
Pesticides	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Phone Books	Any Recycle/DOS	Any Recycle/DOS Station
Pianos, Organs	Lake St. Scales	C&D Rate
Picnic Tables, wooden	Lake St. Scales	C&D Rate
Pillows, Cushions	Lake St. Scales or any DOS	MSW Rate
Pipes, Metal	Lake St. Scales	MSW Rate
Pipes, Plastic	Lake St. Scales	C&D Rate

Plaster, Plaster Board	Lake St. Scales	C&D Rate

Plastic Bags	Lake St. Scales or any DOS	MSW Rate
Plastic Bottles / Jugs	Any Recycle/DOS	Any Recycle/DOS Station
Plastic Chairs & Toys	Lake St. Scales	MSW Rate
Plastic Plumbing	Lake St. Scales	C&D Rate
Plastic, Toys, Other Non-Recycle	Lake St. Scales or any DOS	MSW Rate
Plate Glass	Lake St. Scales	MSW Rate
Play Pens	Lake St. Scales	MSW Rate
Plexiglas	Lake St. Scales	MSW Rate
Plumbing, Metal	Lake St. Scales	MSW Rate
Plumbing, Plastic	Lake St. Scales	C&D Rate
Pool Tables	Lake St. Scales	MSW Rate
Rags, Dirty/Soiled	Lake St. Scales or any DOS	MSW Rate
Recycle Bins	Any Recycle/DOS	Purchase at DOS booth
Refrigerators	**We Do NOT Accept**	Ask for list of Waste Service Providers.
Rims removed from tires	Lake St. Scales	MSW Rate
Rock Salt	Lake St. Scales	
Roofing Materials / Shingles	Lake St. Scales	C&D Rate
Roofing, metal with tar or stone	Lake St. Scales	C&D Rate
Rubber Roofing	Lake St. Scales	C&D Rate
Rugs	Lake St. Scales or any DOS	MSW Rate
Safe, All Metal	Lake St. Scales	MSW Rate
Safe, Metal & Concrete	Lake St. Scales	MSW Rate
Sand	LANDFILL	Call for info on required testing & prior approval.
Sand, Foundry	LANDFILL	Call for info on required testing & prior approval.
Sandpaper	Lake St. Scales	MSW Rate
Sawdust	Lake St. Scales	C&D Rate
Sewing Machines	Lake St. Scales	MSW Rate
Sheetrock, Plaster Board	Lake St. Scales	C&D Rate
Shelves, Metal	Lake St. Scales	MSW Rate
Shelves, Wooden	Lake St. Scales	C&D Rate
Shingles, siding, roofing (Non-Friable Only)	Lake St. Scales	C&D Rate
Shrink Wrap	Lake St. Scales	MSW Rate
Siding, Asbestos (Friable)	**We Do NOT Accept**	Try Steuben County, (607) 776-9631
Siding, Metal	Lake St. Scales	MSW Rate
Siding, Vinyl	Lake St. Scales	C&D Rate
Siding, Wooden	Lake St. Scales	C&D Rate
Sinks, ceramic, fiberglass, or plastic	Lake St. Scales	C&D Rate
Sinks, Metal	Lake St. Scales	MSW Rate
Smoke/Carbon Monoxide Detectors	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Snow Fence	Lake St. Scales	C&D Rate
Soil, Contaminated	LANDFILL	Call for info on required testing & prior approval.
Springs, Metal/Auto	Lake St. Scales	MSW Rate
Stereo Cabinets,	Lake St. Scales	MSW Rate

Metal/Plastic		
Stereo Cabinets, Wooden	Lake St. Scales	C&D Rate
Stoves, Metal	Lake St. Scales	MSW Rate
Strollers, Baby	Lake St. Scales	MSW Rate
Styrofoam	Lake St. Scales or any DOS	MSW Rate
Swimming Pools	Lake St. Scales	MSW Rate
Swing Sets	Lake St. Scales	MSW Rate
Syringes,Medical (from home use)	**We Do NOT Accept**	Call hospital or doctor's office for disposal options.
Tables, Metal	Lake St. Scales	MSW Rate
Tables, Wooden	Lake St. Scales	C&D Rate
Tanks, Air/Gas/Propane	**We Do NOT Accept**	Try a local gas company or scrap yard
Tanks, Auto Fuel (free of liquids)	Lake St. Scales	MSW Rate; must have 1 large or 2 small holes
Tanks, Hot Water	Lake St. Scales	MSW Rate
Tanks, Freon	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Televisions	Lake St. Scales	No charge. Must be intact.
Thermometers	**We Do NOT Accept**	Household Hazardous Waste Day **Call 734-4453**
Tile, Asbestos	**We Do NOT Accept**	Try Steuben County, (607) 776-9631
Tiles, Ceiling, Ceramic or Floor	Lake St. Scales	C&D Rate
Tin Cans	Any Recycle/DOS	Any Recycle/DOS Station
Tire Rims, Metal	Lake St. Scales	MSW Rate
Tires (No Rims Only) up to 4	Lake St. Scales	Unit Charge applies to UP TO 4
Toasters	Lake St. Scales	MSW Rate
Toilets	Lake St. Scales	C&D Rate
Tools, Large, Saws, Drills	Lake St. Scales	MSW Rate
Toys	Lake St. Scales or any DOS	MSW Rate
Transmission Fluid	**We Do NOT Accept**	Household Hazardous Waste Day Call 734-4453
Trees	**We Do NOT Accept**	Check with Town for Yard Waste Program.
Vending Machines, No Freon Type	Lake St. Scales	MSW Rate
Vinyl Siding	Lake St. Scales	C&D Rate
Walkers, Metal	Lake St. Scales	MSW Rate
Washers	Lake St. Scales	MSW Rate
Water Softeners	Lake St. Scales	MSW Rate
Wheelchairs	Lake St. Scales	MSW Rate
Windows, Metal	Lake St. Scales	MSW Rate
Windows, Wood	Lake St. Scales	C&D Rate
Windshield Glass	Lake St. Scales	MSW Rate
Wood	Lake St. Scales	C&D Rate
Wood Building Material	Lake St. Scales	C&D Rate
Wooden Beds	Lake St. Scales	C&D Rate

Village of Elmira Heights

Chemung County New York

Garbage Collection

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Garbage collection.

Garbage Collection Days

In June of 2005, the Village of Elmira Heights and the City of Elmira signed an agreement whereby the City would collect the residential waste generated by the Village.

Under the agreement for shared services, the City is now collecting the refuse twice a week. On Wednesday the West side of the Village from Ashland Avenue to the Rail Road east of College Avenue will be collected,and on Friday the East side of the Village from the RR to the eastern Village line will be picked up. The savings on this service is substantial when compared with a service from a private contractor. The refuse collection is self sustained by the garbage sticker program. Residents can buy the stickers at the Clerk's Office for $2.00 each.

Each household can put out a maximum of 3 bags up to 30 lbs each. A unit containing no more than 2 apartments can also put out a similar number. Units with more than 2 apartments can put out only 2 bags. For everyone, the recycling materials are collected without any charges to the Village or the residents.

ALL BAGS MUST HAVE A STICKER

The garbage stickers may be obtained by mail. Residents can send a self addressed stamped envelope along with a check and the stickers will be mailed.

For more informations about this service and regulations attached to it, please call the Clerk at 607 –734–7156.

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Clear Garbage Bag Requirement for Elmira City Residents

07/11/2014 06:24 PM 07/11/2014 06:53 PM

ELMIRA, N.Y (WETM-18) – Neighbors in the City of Elmira may soon need to use clear plastic garbage bags instead of black garbage bags for garbage disposal.

An Elmira City Councilman said numbers clearly show the community needs to make a change with recycling.

"We have one of lowest rates for recycling in the state of New York per capita...one of the lowest, said Brent Stermer, Second District Councilman in the City of Elmira.

Acting Elmira City Public Works Director, Brian Beasley, described how clear garbage bags will help.

"What we want to do is make sure what's in the bags when the guys transfer any type of solid waste... be it recyclables or garbage...they know by identifying that bag it's truly garbage or recyclable," said Beasley.

Beasley said placing your garbage in clear bags instead of black bags will help the environment and also help out taxpayers.

"It's not only good for the environment. It's beneficial to the taxpayers for the fact it stops an increase of costs that they have to pay to remove each year for their sanitation fee," said Beasley.

Stermer said the new plan is about creating awareness.

"It's really a recycling program. I'm less concerned about the punitive part of not using a clear plastic bag, but I'm more concerned about educating people, educating youth, educating elderly people. 'What can go in the recycling bin? 'What can't?' said Stermer.

Some say this will help the environment.

"We only have one planet. It's worth taking care of," said Kevin Loukopoulous, an Elmira City resident.

For others, clear versus black garbage bags doesn't make a difference.

"If somebody's not going to recycle, they're going to put their recyclables into another bag, which goes into the clear bag that they won't be able to see anyway," said Elmira City Resident Clark Barnes.

And if you decide not to use the clear bags?

"We're working together on that...I'm not specifically going to say what it is, but there will be something to enforce that type of action," said Beasley.

Beasley adds people who currently have black garbage bags should use them right away and then purchase clear plastic bags as soon as possible.

He also said about 8,000 new recycling bins will be given out to Elmira City residents along with a recycling guideline pamphlet.

If approved by the Elmira City Council on Monday, the requirement to use clear plastic bags will go into effect in September.

Single Stream Recycling

Single Stream Makes It Easy To Recycle!

It is not necessary to sort recyclables into multiple bins. Recyclables are separated in a state-of-the-art recycling facility.

Click **here** to see how Single Stream Recyling works.

The Lake Street Materials Recovery Facility (MRF) will accept the following materials for recycling:

Cardboard
Clean Boxboard (shoe boxes, cereal boxes)
Office Paper (white and colored)
Magazines
Newspapers (please don't put them in plastic bags)
Junk Mail
Envelopes (manila and regular)
File Folders
Computer Paper
Post It Notes
Card Stock Paper
Aluminum Cans
Tin Cans
Glass Bottles and Jars
Plastic Bottles #1 -7

Not Acceptable:

Food Waste
Styrofoam
Plastic Bags (return them to the grocery store)
Printer Cartridges (toner or inkjet)
Cell Phones
Batteries
Computers or other electronics
Glassware
Ceramics

Any questions contact Casella or your hauler.

Organic Material Drop Off

The Town of Horseheads does not pick up or dispose of organic materials. However, listed below are Horseheads halers willing to tranport and dispose of clean brush and shrubbery. The work rate is negotiated between the customer and provider and is NOT set by the town nor is the town responsible for services rendered.

A-1 Services 331-4414
Able Tree Service 237-9245
A Cut Above 733-5555
Acorn Tree Service 739-0009
America's Tree Service 734-8337
Can Haul 733-6670
Floyd's Tree Service 739-7869
Joel's Lawn Service 426-5045
Randy Parker 734-6426
Rich's Hauling 857-2605
Twin Tier Tree Service 734-9356
(Carriers can be added to this list by calling Angie Li at 739-8783)

Horseheads residents can deliver clean organic materials such as grass, leaves, branches, logs and wood chips to Black Gold (562-7026) at two locations. To avoid a fee at Black Gold it is best to sort mixed loads on site at home and, then, drop off the different materials in their designated areas at the facility. To avoid delay please call ahead. The closest Black Gold location to most Horseheads residences is the Big Flats Pit (past Bottcher's Landing area) at 119-B South Corning Road, Corning NY 14830.

Question # 2

ORGANIC MATERIAL DROP OFF FACILITY

Revised 04/20/14

Black Gold accepts ***CLEAN***[1] organic materials such as grass, leaves, branches, logs, and wood chips, at our Big Flats location only. We are NOT a garbage dump and enforce very strict policies for the dumping of ANYTHING that is NOT ***"CLEAN"*** 100% organic material. If you dump garbage, glass, nails, C&D, hardware, plastic, and/or *dirty stumps*[2] you will be charged a hefty fee to cover our cost of cleaning up and properly disposing of the material.

HOURS OF OPERATION

We are currently open Monday through Friday from 8AM to 4PM, and Saturday from 8AM to Noon. Organic waste drop-offs will be accepted during our regular business hours. Anyone passing through the electronic gates without authorization will be considered trespassing and will be prosecuted to the fullest extent of the law.

* *Biodegradable* products such as paper are not accepted; only 100% *organic* material is accepted.

CHARGES

Residential customers/Private vehicles will incur a charge of $5.00 per vehicle for each drop off. Commercial Landscapers will incur a charge of $200 for the 2014 season, which covers *all* fleet vehicles for the season. Charges apply to organic drop-offs that meet the clean organic material as described above. Mixed loads, garbage, etc., will incur additional charges.

REGULATIONS

We are happy to serve our community, provide a service that is otherwise a taxpayer's burden, and to do our part in green recycling. Detailed regulations are available at our Information or Call Booth prior to the gated entrance, and on our website at www.blackgoldtopsoil.com

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[1] ***"CLEAN"*** defined as <u>100%</u> organic material ONLY. No nails, hardware, glass, plastic, C&D, garbage, garbage bags--absolutely **NOTHING** other than organic material.

[2] ***"Dirty stumps"*** stumps that have large amounts of soil, stone, clay, and debris entangled within its root system.

Organic Waste Drop-Offs at Black Gold Must comply with the following:

FEES:

Residential customers/Private vehicles will incur a charge of $5.00 per vehicle for each drop off. Commercial Landscapers will incur a charge of $200 for the 2014 season, which covers *all* fleet vehicles for the season. Charges apply to organic drop-offs that meet the clean organic material as described below. Mixed loads, garbage, etc., will incur additional charges.

GENERAL INFO:

Black Gold is NOT a garbage dump! We accept ONLY CLEAN organic materials. There are NO exceptions to this rule, Please note that just because something is biodegradable, it does not mean that it is "organic". Examples of something that is biodegradable but not organic would be paper products and food scraps.

If you have anything other than clean organic materials do not bring them to Black Gold. We have a very strict policy of not accepting anything that is not 100% organic. Any violation of this policy will result in a minimum fee of $50.00, up to a maximum of $250 depending on the offense, and you will be banned from our organic collection site. Items strictly prohibited include, but are NOT limited to, hardware attached to wood, papers, plastic, glass, bottles, bricks, wire, masonry, appliances, tools, landscaping cloth, tires, containers, railroad ties, etc,

The choice is YOURS--Once you have pulled away from the pile and have deposited anything other than organic materials, YOU have made the decision to have us charge you a fee. You will not have the opportunity to go back and sort materials or pick up garbage. We also charge a $50.00 fee for dropping-off in the wrong location at the organic site.

PROCEDURES:

1) You need to stop at the call booth at our entrance to gain access to the mine site. Use the provided phone labeled "Organic" to call the Pit Operator.

2) Some of our drop-off areas may have changed. We recommend that you review the organic drop-off map in the call booth so you know where to go.

3) Materials are to go in the proper locations that are designated by signs at the site. Dropping off material at the wrong location results in a $50 fee.

4) Absolutely NO trespassing/dumping before or after-hours drop-offs without written permission from Black Gold. It is then YOUR responsibility to carry this permission form whenever you drop-off organic materials before or after-hours.

5) We routinely visually inspect loads prior to drop-off. However, as it is impossible to see your entire load when packed in a truck, this inspection will NOT clear you for any violations, fines and/or fees.

6) Your organic material must match one of our "ORGANIC CLASSIFICAITONS" below for acceptance. There is a charge for dropping off unsorted mixed loads. This charge is $5.00 per tire on your entire truck or, truck trailer combinations, regardless whether both are loaded with materials or not. Fee is to be paid in cash prior to dumping.

Pick-up $20.00	Pick-up w/single axle trailer $30.00	
Pick-up dually $30.00	Pick-up w/dual axle trailer $40.00	6 wheel dump w/dual axles $50.00

MIXED LOADS ARE DEFINED as any two or more of the "organic classifications" in one loaded vehicle. To avoid the drop-off fee you may sort the load IF possible and drop each type of organic material in the proper drop-off area. If sorting is not possible, we are forced to charge the fee, or turn the load away.

ORGANIC CLASSIFICATIONS:

Each classification will have a sign to indicate the proper area to drop-off the material. Dropping materials off in the wrong location results in a fee of $50.00 cash, to be paid immediately.

1.	Brush	4" or less
2.	Grass and Leaves	Grass, leaves or a combination of the two (no bags).
3.	Logs	4" and larger
4.	Wood Chips	Wood and brush chipped with NO grass, logs or brush mixed in. Leaves & needles that were on brush prior to chipping are ok.
5.	Clean Stumps	NO dirt, clay, or debris entangled in the roots.
6.	Mixed Loads	(See above) There is a charge of $5.00 per tire and defined above. Grass, leaves or a combination of the two, do NOT count as a mixed load.
7.	Dirty Stumps	We DO NOT accept dirty stumps (stumps with dirt, stone, clay or other debris).

Updated 4/22/14.
Regulations are subject to change.

"Electronics Recycling Available in Chemung County"

Tuesday, April 19, 2011

ELMIRA – Although Chemung County's electronics recycling voucher program is ending on April 30th there are several opportunities for County residents to dispose of their electronic waste free of charge. The County is ending the voucher program due to the passing of the Electronic Equipment Recycling and Reuse Act which requires manufacturers to establish a convenient system for the collection, handling, and recycling or reuse of electronics waste.

Through the voucher program recycling costs were paid for by Casella Waste Systems, the operator of the Chemung County Landfill, in conjunction with Cornell Cooperative Extension of Chemung County and the County. The new legislation will make it even easier to dispose of e-waste.

Currently in Chemung County residents can dispose of unbroken, intact televisions and computer components, free of charge at the Lake Street Transfer Station 7 am – 3:30 pm Monday through Friday, and Saturdays, 7 am to noon. In addition, REACT E-Cycling Inc., located at 225 Colonial Drive near the Arnot Mall, also accepts televisions and computer components, as well as VCR & DVD players, fax machines, gaming consoles, IPODS and MP3 players Monday through Friday from 8 am – 9:30 am, 9:45 am – noon, 12:30 pm – 2:00 pm and 2:15 pm – 3:00 pm. All items are accepted free of charge. Call 607-739-8401 with questions. All television and computer monitors must be intact. Broken items cannot be accepted as they are considered hazardous waste and must be disposed of as such.

Additional e-waste recycling opportunities will become available as the new legislation evolves. Consumers can inquire when making an electronics purchase of the retailers and manufacturers take back policies. Updated information will be posted on the Chemung County website, www.chemungcounty.com, when available.

For more information on the e-waste legislation visit www.dec.ny.gov.

Question # 8

NYS Electronic Waste Collection Sites

Please note: An electronic waste collection site listed might not represent a drop-off acceptance location for your particular type of equipment, so please call ahead.

Chautauqua	Chautauqua County Dept. of Pulbic Facilities-South Co. Transfer Station	2570 South Work Street	Falconer	716-665-6894 (Transfer Sta. #)	00061
Chautauqua	Chautauqua County Humane Society 2nd Chances Thrift Store	707 Fairmount Avenue	Jamestown	716-664-4504	00552
Chautauqua	Chautauqua County Humane Society 2nd Chances Thrift Store	205 Cherry Street	Jamestown	716-664-4504	00956
Chautauqua	Community Helping Hands	31 Water Street	Jamestown	716-487-1488	00536
Chautauqua	Dick Golden Radio & TV Service	1190 Central Avenue, Suite B	Dunkirk	716-672-4834	00215
Chautauqua	EagleZipCom LLC (dba EagleZip.com)	101 West 4th Street	Jamestown	716-661-3183	00384
Chautauqua	Leamer's Electronic SVC Place	176 Fairmount Avenue	Lakewood	716-763-5938	00235
Chautauqua	Office Max	318 East Fairmount Avenue, Room 300	Lakewood	716-763-3304	01046
Chautauqua	STG	280 Tiffany Avenue	Jamestown	716-484-9105	00210
Chautauqua	Tele-Sec Computers & Supplies, Inc	3266 Fluvanna Avenue	Jamestown	716-484-9108	00630
Chautauqua	The Resource Center	433 Buffalo Street	Jamestown	716-485-4614	00975
Chautauqua	Town of Cherry Creek Hwy. Dept.	6914 North Main	Cherry Creek	716-296-5721	01001
Chautauqua	Town of Ripley	50 Ross Street	Ripley	716-736-2201	00999
Chautauqua	Verizon Wireless Retail Store	901 Fairmount Avenue	Jamestown	716-763-7500 (Store #)	01057
Chautauqua	Village of Mayville Recycling Ctr.	96 Morris	Mayville	716-269-4801	00643
Chautauqua	Willow Bay Computer Solutions	17 East 3rd Street	Jamestown	716-483-0035	00895
Chemung	Best Buy #1036	950 County Road 64	Elmira	607-739-9471 (Store #)	00162
Chemung	Chemung Transfer Station	1690 Lake Street	Elmira	585-526-4420	00422
Chemung	Cyberdark Computing	306 North Main Street	Elmira	607-737-0936	00921
Chemung	HEP Sales	2400 Corning Road	Elmira	607-739-0427 (Store #)	00886
Chemung	PC Solutions & Consulting, LTD	407 South Walnut Street	Elmira	607-735-0466	00321
Chemung	REACT E-Cycling, Inc.	225 Colonial Drive	Horseheads	607-739-8401	00175
Chemung	Staples #0279	821 County Route 64	Big Falts	607-796-2327 (Store #)	00687
Chemung	The Salvation Army	2502 Corning Road	Elmira	607-796-9005 (Store #)	00163
Chemung	Town of Horseheads	150 Wygant Road	Horseheads	607-739-2410 (Hwy. Dept. #)	00379
Chemung	Verizon Wireless Retail Store	830 County Road 64	Elmira	607-796-6555 (Store #)	01057
Chemung	Volunteers of America - Elmira	700 Sullivan Street	Elmira	585-733-0222	00519
Chenango	Chenango County Landfill	439 CR 47	Norwich	607-337-1710 (DPW #)	00757
Chenango	Chenango Co. Pomona Grange	431 East Hill Road	Sherburne	607-674-5785	00453
Chenango	Chenango Co. - SW Facility	6701 NYS Rte. 12	Norwich	607-337-1815 (SW Facility #)	00057

Household Hazardous Waste

Household Hazardous Waste Collection Event Information

The Chemung County Fall 2014 Household Hazardous Collection Event is scheduled to take place on Saturday, October 18th. Pre-registration is required and will take place Monday, Sept. 29th through Wednesday, Oct. 15th, (except Oct. 13) weekdays, 9am-4pm. Please call Cornell University Cooperative Extension of Chemung County to pre-register at 607-734-4453.

Here is information for each collection event:

Remember!

- **No electronics**. Click here for what to do with electronics.
- **No latex paints**. Click here for instructions on what to do with latex paints.
- **No pets.**
- **No smoking.**
- **No empty containers!**
- Box your items and place them in your trunk, so the haulers can easily retrieve them.

When registering, please have the following information available:

- Your Name
- Your Phone number
- Your Address
- How you heard about this event:
    - TV ad

  - newspaper ad or article
  - the Internet
  - other
- The waste you intend to bring and the approximate amount
- If this is the first time you have participated in this event

Waiver

You will be asked to ascertain:

"By registering for this event, I confirm that all of the materials I am bringing for disposal were generated by a household and not by a business."

What to Bring

There is no limit to the amount of household hazardous wastes you can bring.

For each item you would like to bring, please describe **how much** of that item you have.

(**Note: do not bring latex paints.** Click here for instructions on what to do with latex paints.)

Acceptable items include:

- Ammonia
- Antifreeze
- Arts and crafts supplies
- Batteries (household types, **not car batteries**)
- Bleach
- Brake fluid
- Cesspool cleaners
- Drain cleaners
- Driveway sealer
- Dry cleaning fluids
- Engine and radiator flushes
- Floor cleaners
- Fluorescent lights (tubes or bulbs)
- Gasoline
- Herbicides
- Insect sprays
- Mercury, items containing mercury

- Metal polish
- Moth balls
- Muriatic acid
- Oil based paint
- Old chemistry sets
- Oven cleaners
- Paint thinner
- Pesticides
- Photo chemicals
- Pool chemicals
- Radiator cleaners
- Rodent killers
- Rust preventatives
- Sealants
- Solvents
- Transmission fluid
- Wood preservatives
- Wood strippers

Latex Paints

Do not bring it to household hazardous waste collection events. It is not hazardous!

- Harden latex paint by exposing it to air or mixing it with kitty litter.
- When it is hardened, remove it from the can, and place it and the empty can and its lid in the trash.

No Agricultural Film

FREE

Agricultural Plastic Container Recycling

Only non-refillable plastic containers from 1 gallon to 55 gallon barrels made from high-density polyethylene (HDPE) embossed with recycling symbol #2 on the bottom are acceptable. Larger containers, such as 250 gal. totes are accepted but must have all metal removed and cut into 2' x 2' strips. 5 gal. buckets must have metal handle removed. Multi-gallon containers must have caps and booklet removed. All containers MUST be clean, empty and pressure rinsed or triple rinsed and dry. Any container that is not clean will be returned to the owner.

Collection will be in June and October. Pick up dates to be announced.

PRE-REGISTRATION REQUIRED

You must call and advise us of the approximate amount of containers you will have for recycling. Collection dates and locations are based on the anticipated amount collected. Large plastic bags to store clean containers are available for free.

Contact Information

Chemung Co. SWCD, Karen Tillotson
(607) 739-2009

Coordinated by Chemung County Soil & Water Conservation District Agricultural Environmental Management Committee (AEM) in conjunction with USAg Recycling, Inc. & Ag Container Recycling Council (ACRC)

Yard Waste Management Infrastructure and Composting in Chemung County, NY

Chemung County Soil and Water Conservation District
August 2009

Sarita Upadhyay
sarita.upadhyay@gmail.com
(518) 588-9443

CHEMUNG COUNTY SOIL & WATER
CONSERVATION DISTRICT

Introduction

Issues in Organic Waste Management

Chemung County is currently struggling with water quality problems due to organic waste pollution. The pollution frequently occurs in two different scenarios. In both instances, residents manage their organic waste in harmful ways. Often times, the residents are unaware that their actions will have harmful environmental implications.

In the first scenario, residents place their organic waste, such as leaves, brush, or grass clippings, on stream or creek banks. The nutrients from the organic waste leach into the water and change its nutrient content. This creates algal blooms and eutrophication. It not only harms the ecosystem, but also makes the water more difficult to purify for drinking.

In the second scenario, residents leave organic waste on a curb or on the street. When it rains, the rain water picks up nutrients from the waste before it enters a sewer. The additional nutrients change the nutrient content of the water and create water purification problems. This also creates problems for municipalities because their highway departments must clean the waste off the street.

Internship Program Goals

The goal of this summer internship was to research how municipalities handle organic waste and what sort of needs they demonstrated in terms of organic waste management. It was also important to gauge homeowner interest in composting and create materials to promote homeowner composting.

Methods and Materials

Research was conducted through interviews, site visits, and online, expert, and library research.

Interviews

I interviewed the municipal highway or public works department in each municipality in Chemung County to ask about their organic waste management infrastructure and needs. Each official provided answers to all the questions in a questionnaire (Appendix A). The interviews took place informally in the municipal offices where the officials work. Each interview lasted between 20 – 90 minutes, depending on the complexity of the municipal systems and needs. After the interviews, I compiled the questionnaire responses to create charts, statistics, and a three-page written document on organic waste management within the county.

Site Visits

In addition, I visited and interviewed four active successful compost sites. During these visits, I asked about how their operations run, how they manage costs, and how they started up. The purpose of the visits was to gain information about how to manage successful compost sites. This information is valuable to municipalities that are interested in starting their own compost sites in Chemung County.

The visited sites were the Village and Town of Bath Compost site in Bath, New York, Onondaga County Resource Recovery Agency (OCRRA) in Camillus, NY, Cayuga Compost in Trumansburg, NY, and the Delaware County Compost Facility in Delhi, NY. Each facility answered the same set of questions from a questionnaire (Appendix B). These sites and their management and cost information will be valuable resources for Chemung County.

Online, Library, Expert Research

I also researched other topics, such as compost equipment, leachate control, and compost science through the internet, library searches, and interviews with specialists in the area of leachate and compost infrastructure at Cornell University. The information and websites I obtained from this research will be resources that the county will be able to use if they proceed with an organic waste infrastructure change.

Results

Municipal Research Results

I recorded the results of the municipal interviews (Appendix C). These findings were used to create a chart and some statistics about municipal waste (Appendix D). In addition, I compiled municipal success stories that highlight programs around the county that work really well (Appendix E).

I created a door hanger to put on the doors of residents who do not properly manage their organic waste (Appendix F).

I made a municipal organic waste pollution education sheet (Appendix G) to give municipalities some background on the pollution issue.

Homeowner Research and Program Results

I was unable to compile statistics about homeowner interest in composting. However, I did offer compost workshops during July and a total of 80 people called or e-mailed about registering for the workshops. Only 60 were accommodated in the given workshops.

In order to give homeowners more information, I created a homeowner packet (Appendix H). The packet includes two brochures, a resource page, and a list of what can go into compost piles.

In addition, I taught boy scouts at a day camp about vermicomposting. The resources used in the presentation include a presentation outline and a crossword puzzle (Appendix I). The presentation was given to approximately 50 boyscouts and an additional 8 adults.

Lastly, I ran a homeowner compost education booth at the Chemung County Fair from August 4-7. The booth included three demonstration compost bins, some compost inputs, two posters, and homeowner informational handouts. During this time, booth volunteers and I spoke to an estimated 150 people about composting.

Municipal Needs

Municipal officials demonstrated various organic waste-related needs during municipal interviews.

1. Municipalities need a place for homeowners to **dispose of Christmas trees**. Many residents don't have any public option for Christmas tree disposal. This could also extend to brush removal, since many residents have large bulky branches that they need to dispose.

2. Some municipalities don't have any organic waste pick-up or drop-off locations, leaving residents with fewer options in dealing with their waste. They must let it sit on their property, burn it, or contract with an independent contractor who can get rid of it. The municipalities with this infrastructure demonstrate a need for **organic waste drop-off sites** where they can bring their waste.

3. Currently one municipality, the Town of Horseheads, partakes in **mortality composting**. Carcasses are composted with wood chips. Other municipalities have a high volume of road kill that gets dumped into a landfill. These municipalities demonstrate a need for mortality composting.

4. Many municipalities need some **educational materials to help homeowners** understand what they are and are not allowed to do with their organic waste. It is especially important for municipalities to communicate to homeowners that they may not throw organic waste in ditches or on the streets.

5. Some municipalities did not know about organic waste management pollution issues and were not aware of organic waste mismanagement. This demonstrates a need for **municipal pollution prevention education.**

Homeowner Needs

Homeowners at events and workshops have explained their organic waste management needs. In addition, municipal officials demonstrated a need for homeowner education.

1. **Homeowners need education** to learn about their organic waste options. This includes compost education as well as stormwater runoff education and organic waste management education. Interest in compost education was gauged through sign-ups for compost workshops and through interest at fair.

2. Homeowners demonstrated interest in **pet waste disposal.** These homeowners need information on pet waste management, the hazards of pet waste, and pet waste composting.

Next Steps and Resources

Municipal Infrastructure

Successful Organic Waste Management Programs and Coordinators in Chemung County

These municipalities all have very successful programs in a specific field. For more information on their infrastructure, please call the given contact. The given contacts also serve as potential site coordinators for future programs.

City of Elmira: Organic waste drop-off site, windrow composting system, dial-a-truck program
Contact: Shawn Crater**
Phone: 607-737-5750
E-mail: scrater@cityofelmira.net

Town of Southport: Organic waste drop-off site, partner with Black Gold
Contact: Dave Bachman
Phone: 607-733-5467

Town of Horseheads: Carcass Composting
Contact: Kevin Smith
Phone: 607-739-2410

Village of Elmira Heights: Leaf and brush pick-up program
Contact: Jean Cazorla
Phone: 607-732-1122

** Highly recommended for compost site management

Successful Compost Sites Outside of Chemung County

These are compost sites in nearby counties. For more information on the infrastructure of a specific site, phone or e-mail the given contact. Please note which systems are public and which are private.

Windrow Systems

Village & Town of Bath: Municipal compost system in Steuben County
Contact: Jeffrey Muller
Phone: 607-776-6321
E-mail: jmuller@villageofbath.org
Feedstocks: Leaves, Brush, Grass Clippings

Cayuga Compost: Privately-owned compost company in Trumansburg, Tompkins County
Contact: Mark Wittig
Phone: 607-387-6826
Website: http://www.pandsexcavating.com
Feedstocks: Leaves, Brush, Grass Clippings, Food Waste, Floral Waste/Trimmings, Compostable Plastics, Manure

Black Gold Compost: Privately-owned compost company in Corning, Steuben County
Contact: David Bowers

Phone: 607-562-7026
Website: http://www.blackgoldtopsoil.com
Feedstocks: Leaves, Brush, Grass Clippings

Mt. Savior Monastery Compost: Privately-owned on-farm composting
Contact: Brother Bruno Lane
Phone: 607- 734-1688
Website: http://www.msaviour.org/
Feedstocks: Manure, Food Waste, Grass

Cornell Waste Management Institute: University owned and operated compost site with leachate capturing pond
Contact: Jean Bonhatol
Phone: 607-255-1187
E-mail: jb29@cornell.edu
Feedstocks: Leaves, Brush, Grass Clippings, Food Waste, Floral Waste, Manures, Compostable Plastics

Static Aerated Systems
Onondaga County Resource Recovery Agency (OCCRA): Privately-owned compost site in Onondaga County
Contact: Greg Gelewski
Phone: 315-453-2866
E-mail: ggelewski@OCRRA.org
Website: http://www.ocrra.org/
Feedstocks: Brush, Leaves, Grass Clippings, Food Waste, Some compostable plastics, Floral Waste

Other Resources

General Compost and Organic Waste Info
For fact sheets or further information on composting or organic waste management, contact these organizations.

Cornell Waste Management Institute
Contact: Mary Schwartz and Jean Bonhotal
Phone: 607-255-1187
E-mail: masp5@cornell.edu (Mary) & jb29@cornell.edu (Jean)
Website: http://cwmi.css.cornell.edu/
Map of NYS compost sites: http://compost.css.cornell.edu/maps/simple-search.asp

Cornell Cooperative Extension of Chemung County
Contact: Toni Gardener
Phone: 607-734-4453
E-mail: ag226@cornell.edu

Chemung County Entrepreneurial Contact
This is a local who is interested in starting a large scale compost system on his farm.

Tim Saunders
Phone: 607-732-0796

Information on Leachate Control
Prof. Joe Regenstein, Cornell University
Phone: 607-255-8041
E-mail: jmr9@cornell.edu

Partnership Contacts
These are organizations that either currently do or could play a role in municipal organic waste services. They provide equipment or will accept organic waste for mulch or fuel.

S & M McDonald Contracting – tub grinding, screening, taking compost materials
Phone: 607-732-4034
Cell Phone (Mike): 607-731-2653
E-mail: mmcdonald1@stny.rr.com
Website: www.mcdonaldcontracting.com

Black Gold Compost – taking compost materials
Contact: David Bowers
Phone: 607-562-7026
Website: http://www.blackgoldtopsoil.com

Elmira Correctional Facility Compost – taking compost materials
Phone: 607-734-3901

TreeSource Solutions – purchasing woodchips (Appendix J)
Contact: Jack Santamour
Phone: 315-323-4882
E-mail: jsantamour@treesourcesolutions.com

Homeowner Program Infrastructure

Homeowner Composting Education Workshops
Because of the high level of interest, I recommend that compost workshops are continually offered. The Conservation Cabin at the Chemung County Fairgrounds provides an excellent location for the workshops. Horseheads is centrally located within the county, making sure that no county residents are extremely far from the workshops.

If a particular municipality is targeted for a workshop, I would recommend increased advertising for the workshop in the area. If facilities are available, it could be held in the municipality. However, it is important that there be enough demand within the municipality or that it is well advertised to residents of other municipalities.

It is recommended that the workshop size remain between 10 and 30 people. It is important to do introductions at the beginning of the workshop and have each person give his/her compost background. This helps the teacher to gear the workshop towards the students.

To run the composting workshop, a person should fulfill particular requirements:

- An understanding of the science behind composting
- At least 8-10 years of composting experience
- A knowledge of various compost techniques, especially layering
- Some sort of composting and gardening education

The Cornell Cooperative Extension Chemung County Master Gardeners are highly recommended workshop leaders. To get more information about Master Gardeners, get in touch with the program coordinator.

Jabe Warren
CCE Master Gardeners Program Coordinator
Phone: 607-734-4453
E-mail: jew223@cornell.edu

Three recommended Master Gardeners and one non-Master Gardener volunteered at the Chemung County Fair compost booth. These people all attended a compost workshop and have years of composting experience as well as a good understanding of compost science. They are also recommended to run any compost education tables at events.

Dean Pappas
Phone: 607-731-9997
E-mail: amnotpappas@yahoo.com

Cindy Seeley
Phone: 607-734-3772
E-mail: dseeley@stny.rr.com

Ron Tunison
Phone: 607-739-8474
E-mail: Tunimusic@aol.com

I also think there needs to be a push in compost bin advertising, whether through signage, the website, or pamphlets/handouts.

Pet Waste Composting

Many residents seemed interested in pet waste composting both at compost workshops and at the county fair. Literature on pet waste composting should be available online and through each municipality (Appendix K). Also, information about pet waste digesters should be available, including the company(ies) that sell them, the price, and the level of work involved in

installation and use. It is important that literature have a warning about the dangers of pet waste composting.

Composters.com
Pet waste composting products
http://www.composters.com/pet-waste-products.php

Chemung County could also have pet waste initiatives and education in public parks. Elmira is looking to build a dog park and zero waste pet waste initiatives would work particularly well there. There are companies that work to do zero waste pet waste initiatives.

Zero Waste USA
Provide compostable pet waste bags and zero pet waste systems
http://www.zerowasteusa.com/

Mutt Mitt
Provides compostable pet waste bags and zero waste systems
www.MuttMitt.com

Grant Writing

The NYS Department of Environmental Conservation has grants available for compost facilities and equipments.** This grant covers 50% of costs for eligible costs. Eligible items for funding include machinery, land, and facilities. Counties and municipalities are both eligible to apply for the funding. The DEC would like to see very quantitative data in the grant applications. If a municipality or county is applying for a grant, it should conduct thorough research on the projected data after project implementation. Also, it is necessary to calculate the entire project budget before completing the grant application.

Grant information and applications are available at http://www.dec.ny.gov/pubs/4776.html.

** The machinery, etc. must already be paid for at the time of application. It also may take 1-4 years to receive the grant money.

Appendix A
Questionnaire used during interviews with Chemung County municipal officials to ascertain information about their organic waste management.

Questionnaire for Officials

1. Name and Title:
2. What kinds of organic waste are most prevalent in your municipality and do they pose any environmental threat?
3. Where do the organic wastes end up? (Landfill, compost, etc)
4. What are the steps of the organic waste disposal system? What role do citizens play and what role does the county play?
5. Who funds the operation (grant funding, gvt funding, tipping fees, etc.)? Do you make a profit in any way (selling products)?
6. What are the government regulations on your system?
7. What are the costs of your organic waste removal plan?
   a. Removal costs
   b. Labor costs
   c. Permits
   d. Other
8. Have you taken any measures to reduce the spending/lower costs of your program?
9. Have there been any problems/complaints with the system? What are the pros/cons? In what (if any) ways could your system be improved? Is there a particular kind of system you would like to see in your municipality?
10. Are there any current efforts to change the system? Have there been any proposals in the past?
11. If there is a compost system, what type of system is it? How many people manage it? How many people work doing the labor? What kind of equipment is used? How many yds/year does it produce?
12. What do you do with the finished compost? Do you/could you sell it? To whom?
13. What is your impression of general compost knowledge among residents? Do many of them compost at home?

Appendix B

Questionnaire used during interviews with successful compost facilities outside of Chemung County to ascertain information about their management practices and costs.

Questionnaire for Compost Sites

1. Compost Site and Manager:
2. What are your feedstocks and feedstock sources?
3. What kind of composting system do you have?
4. Have you always had a similar system? How long has it been operating?
5. How is the compost maintained? What kind of machinery do you use? How many hours of labor does it take per week to run the system? What are the daily/weekly tasks?
6. Who runs the site? What kind of background/training/knowledge did that person have?
7. How did you go about obtaining a permit?
8. What kind of sampling do you do? What is required by the government for your facility and how much time/effort does it take to do it?
9. What were the initial start-up costs of the company (to invest in equipment, etc)? What did the start-up costs include?
10. Did you obtain any government money or grants in order to start?
11. What are the costs of the compost system?
    a. Removal/transportation
    b. Labor
    c. Permits/Samples
    d. Other
12. What cost-saving measures have you taken, if any?
13. Have you had any problems? What are your biggest challenges? How do you contain odors?
14. What do you think your compost company/system really excel at? What are your strongest points?
15. Do you make any income from the process? If so, what do you sell and how is it priced (finished products, tipping fees, etc)? Is the company profitable (or could it be)?

Appendix C

Results/findings of interviews with municipal officials in Chemung County concerning current organic waste infrastructure.

Chemung County Municipality's Current Compost Efforts and Needs

Town of Catlin
Current Infrastructure:
Wood Chipping – brush or branches from trees are brought to a site where a wood chipper is used to grind them into wood chips. Wood chips are either thrown back into the woods or citizens can come pick them up to use for landscaping. Citizens can also call in and the highway team will drop the woodchips off at their homes.
The county does not deal with other kinds of organic waste.
Needs: None, happy with current system

Town of Chemung
Current Infrastructure:
Wood Chipping – brush or branches from trees are brought to a site where a wood chipper is used to grind them into wood chips. Wood chips are either thrown back into the woods or citizens can call in and request them for landscaping or composting. Then the highway dept. will drop off woodchips.
Road kill – road kill is taken to the county landfill.
It is common to find leaf debris in ditches on the road. Leaf debris is blown into the woods.
Needs: Getting residents to keep leaves out of ditches, wouldn't mind having a compost program

Town of Elmira
Current Infrastructure:
Wood Chipping – Brush is collected after storms and a tub grinder is used to make wood chips. The chips are given to a nearby nature center, which uses the chips for its trails or to a butcher, who uses them to bury animal remains. The chips are given out free of charge.
Leaf pickup – There is leaf pickup in both the fall and spring. In the fall, both curbside and bagged leaves are picked up while only bagged leaves are picked up in the spring. The leaves stay at the Highway Department until January or February, when they are trucked to South Corning's Black Gold for-profit compost company.
The municipality does not deal with grass clippings.
Needs: Would like to see a centralized location for tub grinder so it doesn't have to travel from place to place. Also would like cards to put on doors to notify residents of code violations. Grass clippings currently go to the landfill, and they would be interested in composting them/diverting them instead.

Town of Horseheads
Current Infrastructure:

Carcass composting – the town uses a wood chipper to grind tree brush/branches from the roads to make wood chips. The wood chips and animal carcasses are composted together. The carcasses come from road kill and euthanized animals from the animal shelter. The compost is not used.
The county does not deal with other kinds of organic waste.
Needs: None, happy with current system

Town of Southport
Current Infrastructure:
Leaf pickup – The town does leaf pickup for 6-8 weeks in October through December. Leaves are only collected in plastic bags. If a resident does not package his/her leaves, s/he receives a code enforcement message.
Branches are not collected, but Christmas trees are collected for about 2 months, starting the day after Christmas.
Organic waste drop-off – residents may, at any time, drop off any yard waste at a particular drop-off site located within the Town of Southport. Residents may bring brush, yard/garden waste, grass clippings, or leaves to the site. The leaves and Christmas trees that the city picks up are all brought to this site as well. Once the site is full, a tub grinder is used to grind the material into mulch. The Corning for-profit compost company Black Gold comes and hauls the mulch away to use for their compost site. Any leftover mulch is available for citizens to take and use in their yards. The site is maintained regularly (every other day) – a worker simply pushes the waste as far back as it will go to allow increase available space. Contamination has not been a big problem. There is a space for plastic bags/other garbage and there are clear signs in the site.

Village of Elmira Heights
Current Infrastructure:
Wood Chipping – Brush is collected for 2.5 – 3 weeks in April and after any kind of emergency (ice storms, etc). A wood chipper is used to grind the wood into chips. The chips are then kept at a park. Residents may come take woodchips for landscaping and they are used in local playgrounds as well. Christmas trees are also picked up for 2 months (January – February). Wood chips are also made from these trees and given to residents or playgrounds.
Leaf pickup – the city picks up approximately 2,800 cubic yards of leaves from houses. They are given to the prison, where they are composted.
The village has a "pay as you throw" trash system, which means that composting organic waste will save residents money.
The municipality does not deal with grass clippings.
Needs: Getting residents to keep leaves and other wastes off of the streets

Town of Veteran
Current Infrastructure:
Wood Chipping – Brush from streets is collected after emergencies. The brush is brought back to the highway department and chipped with a wood chipper (generally they borrow the one the Town of Catlin owns). Sometimes, if they get calls from residents asking what to do with brush/branches, they

allow them to bring the brush up and they will chip that as well. The chipped wood is then blown into the woods.
The town does not deal with any kinds of homeowners' organic waste at this time. Some organic waste is burnt or placed in the landfill.
However, the town is currently looking into creating a drop-off site for residents to use (on rt. 13). The town already owns a plot of land and is currently examining expenses/permits needed to convert it to a drop-off site.
Needs: Creating a drop-off site for organic waste.

Town of Erin
Current Infrastructure:
Wood Chipping – The town collects and chips the branches they find in the streets after storms. The wood chips are left for residents to come and take for their yards. Sometimes residents drop off their waste at the highway department, but it is not encouraged.
The town does not deal with any other organic waste.
Home Compost – Roger believes that many residents are now composting on their own to get rid of their organic waste.
Needs: The town would like some sort of infrastructure for people to deal with Christmas trees (drop-off site potentially) and would be happy to have a drop-off site.

Town of Baldwin
Current Infrastructure:
Branch disposal – The town picks up branches from the road after storms and brings them to the fire department. The branches are stored there for some time and then eventually they're buried.
The town does not deal with any other organic waste.
Needs: The town would like some sort of infrastructure for people to deal with Christmas trees (drop-off site potentially) and would be happy to have a drop-off site.

Town of Van Etten
Current Infrastructure:
Annual brush pick-up – Every year the municipality provides a brush pickup. Residents pile their brush in front of their homes and the town picks up all the brush. They then grind it into wood chips and deliver the chips to residents who request them.
The town does not deal with any other organic waste.
The highway superintendent believes that many citizens are composting individually in their yards.
Needs: None, happy with current system

Village of Wellsburg
Current Infrastructure:
Organic waste drop-off – Residents may drop off their organics at the ballpark near the village. The town of Ashland then deals with the organic waste.
Needs: None, they mostly outsource work to other municipalities, the county, or the state.

Town of Big Flats

Current Infrastructure:

Brush pick-up – The town picks up brush from residences for two weeks in April and after emergencies. It also picks up Christmas trees from the end of December through January. These organic wastes are taken to the drop-off/compost site, ground, and used in the windrows.

Leaf pick-up - The town does leaf pickup for 6-8 weeks in October through December. The pick-up is curbside only.

Organic waste drop-off – Residents may, at any time, drop off any yard waste at a particular drop-off site located within the Town of Big Flats. Residents may bring brush, yard/garden waste, grass clippings, or leaves to the site. The leaves and Christmas trees that the city picks up are all brought to this site as well. Once the site is full, a tub grinder is used to grind the material into mulch. The mulch is then put into windrows for composting. The piles are turned annually. Finished (unscreened) compost is available for citizens to take for their yards.

Needs: To better organize the compost site.

City of Elmira

Current Infrastructure:

Leaf pick-up – The city does leaf pickup for 6-8 weeks in October through December. The pick-up is curbside only. The pick-up is done with front end loaders. Vacuum trucks are used if necessary.

Christmas tree pick-up – The trees are picked up for 6 weeks starting right after Christmas. They are brought to the compost side and ground using the tub grinder.

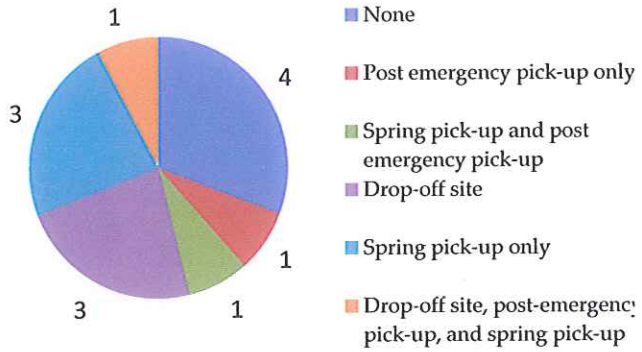
Dial-a-truck – The city offers a program where a resident can request a truck to be left at his property overnight. S/he then loads the truck with organic waste. A city worker then picks up the truck and brings the organic waste to the city compost facility. The service costs $35/use.

Organic waste drop-off and compost site - Residents may drop off any yard waste at a particular drop-off site located within the City of Elmira. The site is opened during a specific window only and residents must obtain a permit in order to use the site. Residents may bring brush, yard/garden waste, grass clippings, or leaves to the site. The leaves and Christmas trees that the city picks up are all brought to this site as well. Once the site is full, a tub grinder is used to grind the material into mulch. The mulch is then put into windrows for composting. The piles are turned three times per year. Finished compost is available for citizens to take for their yards. The city also has made a deal with Black Gold Compost For-Profit Company. The city will give them some of its compost in exchange for free screening service. The additional cost of the compost system is only for the tub grinder ($65/hr). The city has experienced savings in labor hours, fuel costs, and top soil costs.

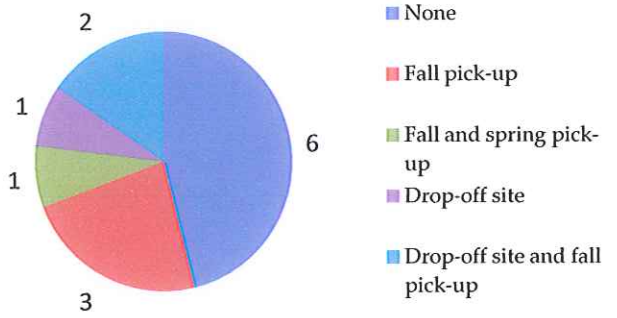
Appendix D
Statistics about current municipal organic waste management infrastructure in Chemung County.

Chemung County Current Infrastructure Statistics

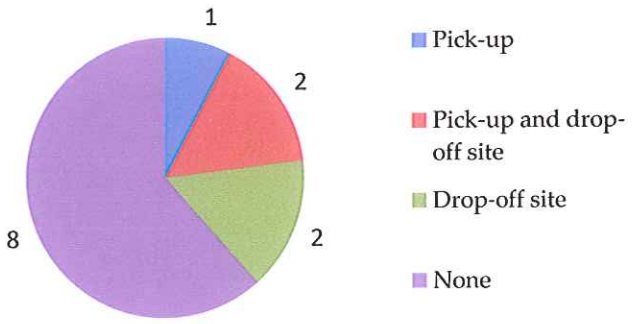
Brush Waste Management Strategies and Frequencies



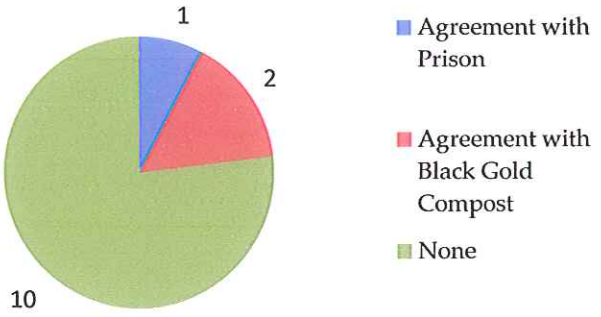
Leaf Waste Management Strategies and Frequencies



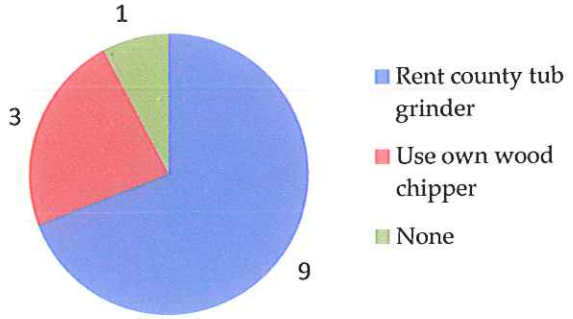
Christmas Tree Management Strategies and Frequencies



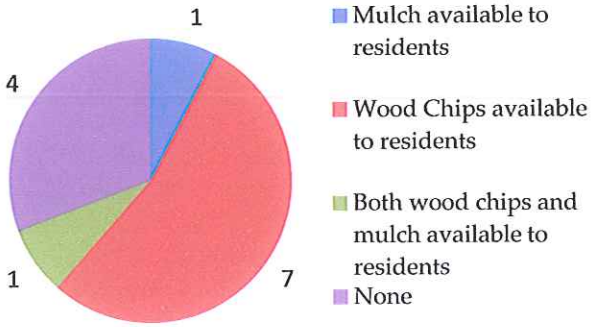
Frequency of Agreements With Outside Entities



Methods of Wood Chip Grinding



End Products Available to Residents



	City of Elmira	Town of Ashland	Town of Baldwin	Town of Big Flats	Town of Catlin	Town of Chemung	Town of Erin	Town of Elmira	Town of Horseheads
Municipality Services									
Fall Leaf Pickup	X			X				X	
Spring Leaf Pickup								X	
Christmas Tree Pickup	X			X					
Spring Brush Pickup					X				
Post-Emergency Homeowner Brush Pickup								X	
Carcass Composting									X
Wood Chip Grinding	X		X	X	X	X	X	X	X
Wood Chips/Mulch Available for Resident Use	X			X	X	X	X	X	
Drop-off Site for Organic Waste	X	X		X			X		
Compost System	X			X					
Outside Agreements to Take in Organic Waste									
Partner with Black Gold Compost	X							X	
Partner with the Prison									

Municipality is in process of implementing program

Service is available upon specific citizen request

	Town of Southport	Town of Van Etten	Town of Veteran	Village of Elmira Heights	Village of Horseheads	Village of Millport	Village of Van Etten	Village of Wellsburg
Municipality Services								
Fall Leaf Pickup	X			X	X			
Spring Leaf Pickup								
Christmas Tree Pickup	X			X	X			
Spring Brush Pickup	X	X		X	X		X	
Post-Emergency Homeowner Brush Pickup	X			X				
Carcass Composting								
Wood Chip/Organic Waste Grinding	X	X	X	X	X		X	
Wood Chips/Mulch Available for Resident Use	X	X		X			X	
Drop-off Site for Organic Waste	X		X		X			X
Windrow Compost System					X			
Outside Agreements to Take in Organic Waste								
Partner with Black Gold Compost	X							
Partner with the Prison				X				

Municipality is in process of implementing program

Service is available upon specific citizen request

Appendix E

Success stories in organic waste management in Chemung County.

Municipal Success Stories

The Town of Southport

Organic Waste Drop-off Site

The drop-off site allows residents to dispose of their organic waste for free at their convenience. The town maintains the site every other day by using machinery to compact the organic waste. By doing this on a regular basis, they ensure that there is always ample space for more waste. To avoid disposal of unwanted items, the town put trash cans and signs up prohibiting plastic bags and other trash. When the site fills up, the town obtains the county tub grinder and grinds all of the material. Most of the ground material is given to Black Gold compost facility in Corning, NY. The company comes to pick up the material free of charge. The remaining ground material is left for residents to use as mulch.

How does it serve the community?

This program allows residents to dispose of their waste at any time. If they miss the town organic waste pick-up or have waste during the off-season, they still have an option. Though there is regular maintenance, it is easy, quick, and cheap for the town to operate.

The City of Elmira

Dial-a-truck program

The dial-a-truck program provides residents with an easy cheap way to rid of their organic waste. A resident calls the city and requests a dial-a-truck. A city worker parks a truck on the person's property. The resident loads his organic waste onto the truck. The city worker then returns the next day to drive the waste-filled truck to the city drop-off site. This service costs $35 per use.

How does it serve the community?

Though the city has a drop-off site for waste, not everyone in the city has the means to transport their waste. This provides public transit users and the elderly with organic waste disposal options. Some residents also may have too high a volume of organic waste to transport it themselves. This program allows them access to a larger vehicle. This program is cheap and easy for the city to operate.

Municipal Compost System

All organic waste that is dropped off by residents is used to create windrows of compost. The material is first ground with the county tub grinder and then arranged into windrow piles. The piles are turned approximately three times a year. The compost is screened when it is finished and will be used by the city and residents.

How does it serve the community?

This program saves the city money, which means that taxpayers are getting more services for their money. Before the city implemented the compost system, it hauled waste to the landfill. The city has saved on tipping fees at the landfill, labor hours for sending staff to drive 1.5 hours to the landfill, and gas money. The costs of maintaining the compost site are labor hours (greatly reduced from the landfill infrastructure), tub grinding, and screening costs. The city also no longer purchases top soil. The exact savings have not been calculated but they are estimated to be in the thousands to tens of thousands dollars per year.

The Town of Horseheads

Carcass Composting System

Brush that the highway department picks up from the streets is ground into wood chips and then layered with animal carcasses from the nearby dog shelter. The wood chips are stacked in a pile next to the compost pile. When there are carcasses to compost, then the carcasses are transported to the compost pile and covered with wood chips.

How does it serve the community?

This program keeps carcasses out of the county landfill. It also keeps them covered and away from the public. The town is also using their woodchips for something useful through this program. The entire operation is fairly cheap to operate and takes very little time and labor.

Appendix F

Door hangers that municipal officials can use when residents improperly manage their organic waste.

The
TOWN OF SOUTHPORT
1139 Pennsylvania Ave., Elmira NY 14904
Office 607-737-5268 Monday – Friday 8:30 AM to 4:30 PM

ORGANIC WASTE MANAGEMENT VIOLATION

____ Organic waste disposed of on street or in ditch

____ Organic waste on curb for a long period of time when waste pick-up is not scheduled

____ Organic waste disposed of in a nearby body of water

____ Other
Explanation: _____

_____

_____

Please note that organic waste mismanagement can cause pollution and create additional work for your municipality. Please address these violations immediately. If you have further questions, please contact your municipality.

ISSUE

DATE _____ BY _____

ADDRESS _____

COMMENTS _____

The
TOWN OF SOUTHPORT
1139 Pennsylvania Ave., Elmira NY 14904
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ORGANIC WASTE MANAGEMENT VIOLATION

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Explanation: _____

_____

_____

Please note that organic waste mismanagement can cause pollution and create additional work for your municipality. Please address these violations immediately. If you have further questions, please contact your municipality.

ISSUE

DATE _____ BY _____

ADDRESS _____

COMMENTS _____

Appendix G

An educational fact sheet for municipalities to learn about organic waste pollution and how they can play a role in pollution prevention.

Issues in Organic Yard Waste Water Pollution

Although the word "pollution" generally induces images of smokestacks and automobiles, it is important to recognize the threat of water pollution caused by organic yard waste. In fact, typical yard wastes such as leaves, branches, or grass clippings seem so harmless that many people remain unaware about the problems they cause. Your municipality has the opportunity to educate residents on these issues and create infrastructure to prevent pollution.

Yard waste water pollution is caused by an excess of waste near a water supply. The nutrients from the yard waste slowly leach into the water, which changes the normal nutrient content of the water. Because of the increased nutrient content, the oxygen level decreases; this process is called eutrophication. Algal blooms appear and the wildlife that inhabited the body of water can no longer survive. The change in nutrient content also makes the water more difficult to purify for drinking.

The brush and grass clippings in these photos were placed a creek by homeowners. The nutrient from the brush and clippings will leach into the water and change its nutrient content.

Homeowner organic yard waste mismanagement is a major cause of water pollution. Many homeowners must deal with a large amount of leaves, branches, and grass clippings. The landfill in Chemung County does not accept these yard wastes. To responsibly handle wastes, residents must compost the material, make arrangements with a private firm, or use the available municipal yard waste disposal infrastructure. However, some residents instead dump the wastes into nearby streams, creeks, or rivers. Many of these residents think that this waste management strategy is acceptable and not environmentally detrimental. In fact, this method of waste disposal creates harmful eutrophication and algal blooms.

Municipalities can play an important role in preventing this type of pollution. First, they can offer infrastructure to residents so that they are able to responsibly dispose of organic waste. The easiest way to

provide residents with a waste disposal method is a pick-up system or a drop-off site for yard waste. Second, municipalities can play a role in informing and educating citizens about these issues. This can be done by distributing literature, providing workshops, and interacting with residents.

Appendix H

Homeowner organic waste and composting education packet – includes an organic waste management brochure, a backyard compost brochure, a compost resource page, and a "what to put in the compost bin" list.

WHAT ELSE CAN I DO AT HOME TO PREVENT WATER POLLUTION?

- Pesticides, herbicides, and even fertilizers that many homeowners use in their gardens can leach chemicals into the water supply. Be careful about your placement of chemical products. Don't put them on paved areas or in the path of stormwater runoff water.
- Four inches of mulching can reduce or eliminate the need to water and weed in your gardens.

Mulching your garden will reduce weeds and retain moisture. This will help your garden flourish and reduce the need for chemical products.

- After mowing, spread the grass clippings across the freshly mowed grass. They will help retain moisture in your lawn. Alternatively, put the clippings into a compost pile.
- Grow native grasses on your lawn and in your gardens. They require less fertilizer, pesticides, and water than non-native grass species.

CHEMUNG COUNTY SOIL & WATER CONSERVATION DISTRICT

Our Mission

To Protect and Enhance the Natural Resources of Chemung County by:

"Developing partnerships and networks and by implementing innovative solutions to our Natural Resource Concerns."

CHEMUNG COUNTY SOIL AND WATER CONSERVATION DISTRICT

851 Chemung St
Horseheads, NY 14845

Phone: (607) 739-2009
Fax: (607) 739-4392
E-mail: kareehillotson@stny.rr.com

CHEMUNG COUNTY SOIL & WATER CONSERVATION DISTRICT

A GUIDE TO ORGANIC WASTE MANAGEMENT

www.richmondhill.ca

RESIDENTIAL ORGANIC WASTE MANAGEMENT

WHAT IS ORGANIC WASTE?

Organic waste is defined as waste that comes from plant and animal sources and can be broken down by living organisms. Here is a list of the organic waste you may deal with.

- Leaves
- Grass Clippings
- Garden Waste
- Brush
- Food Waste
- Yard Waste
- Manure
- Christmas Trees

WHY DOES ORGANIC WASTE POSE A PROBLEM?

When organic waste is improperly handled, it can damage the natural environment and harm the municipal water supply. One example of this is when organic waste is dumped into a body of water, such as a river, stream, or creek. The nutrients from the organic waste enter the water, changing its nutrient content. This allows more plants and algae grow in the water. When these plants and algae die, it further increases that amount of organic waste in the water. The excess organic waste lowers the level of oxygen in the water, a process called **eutrophication**. The water becomes polluted and unhealthy, making it difficult to purify for drinking. The lack of oxygen in water also harms plants and animals in the ecosystem. Water pollution can also occur when homeowners leave organic waste on the curb or paved surface for a long period of time. When it rains, the water runs past this organic waste. The nutrients from the waste leach into the moving water, changing the nutrient content of the water.

WHAT DOES THE PROBLEM LOOK LIKE?

Photo courtesy of Mark Weis

Though it may seem like a good idea to return organic waste to a natural environment like a stream or river, it can be detrimental to the ecosystem and water supply. In fact, throwing organic waste onto a stream, creek, or river bank causes water pollution. Waste like the brush and leaves in these photos should be handled responsibly through composting, independent contracting, or using a municipal program. Read on for details on responsible organic waste management.

HOW CAN I RESPONSIBLY HANDLE ORGANIC WASTE?

Backyard composting
This is an easy sustainable solution to organic waste management issues – simply buy a bin for your yard, check out our composting instruction manual, and get started. You'll end up with a great amendment to soil that will make your garden and house plots flourish. Once your bin is set up, maintaining the compost pile is almost no work!

saratoga.wordpress.com

If your municipality offers organic waste pick-up, check if you need to bag waste or not.

Municipal organic waste pick-up
Some municipalities provide organic waste pick-up a few weeks each year. Do your research to find out what weeks of the year your municipality picks up organics. Be careful not to leave organics out at times when there is no pick-up, as nutrient runoff from leaves or brush can harm water sources.

Drop-off at a municipal site
Some municipalities provide a drop-off site for organic waste. Some also leave the finished compost out for residents to take home. Other nearby municipalities may accept organic waste from your municipality.

How do I maintain my pile?

What goes in the pile

Put **stalky material** like large sticks or stones in the bottom of the bin. This will allow air to flow through the bottom of your pile.

Compost Component	Source
Oxygen	Air and turning
Water	Rain (add water in very dry conditions)
Carbon (Brown material)	Fallen leaves, paper, wood chips, hay, straw, old grass clippings. Most organic material that has a brown color will work.
Nitrogen (Green material)	Grass clippings, fresh leaves, food scraps. Most living organic matter will work.

Learn what your compost pile needs to survive. Your job is to make sure your compost receives each of these components.

There should be approximately three buckets of carbon (browns) in your pile for every bucket of nitrogen (greens).

Learn to layer

Learn how to layer your compost to maximize air space and minimize smell. If this step is done correctly, your compost **will not smell**. Start with a layer of **carbon** materials on top of the stalky material. Mold it into a bowl shape. Then add some **nitrogen** materials to the middle of the bowl. Promptly after adding the nitrogen, cover it with carbon materials so that there are **no greens (nitrogen) showing** at all. This will eliminate odors and rodents. Whenever you add nitrogen material to the compost, immediately cover it with carbon materials. Nitrogen "green" layers should be 1-2 inches thick and carbon "brown" layers should be 2-3 times as thick as green layers.

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CHEMUNG COUNTY SOIL & WATER CONSERVATION DISTRICT

A Guide to Backyard Composting

www.dcr.com

Going GREEN in your own backyard!

Home Composting: Some Basic Information

What is compost?

www.lancaster.gov.us

Compost typically produced in a backyard compost system.

Compost simply means controlled decomposition. For homeowners, it means putting all your organic waste (leaves, garden waste, food waste, etc) together and decomposing it in a controlled environment. The result is compost, a nutrient-rich garden amendment.

Why compost?

- It's a responsible convenient way to get rid of your organic materials. You can put a compost pile right in your backyard for easy waste disposal.
- Once all the organic material has decomposed, it creates a nutrient-rich substance that will help your flowers, vegetables, and potted plants thrive.
- Organic waste that is put out on the curb or thrown into a stream can pollute the municipal water supply. Nutrients leach out of organic waste and into flowing rain or stream water, thus changing the normal nutrient content of the water.

www.depthofeq.org

You can easily deal with organic waste like leaves with a compost pile.

What is required?

To get started you will need a bin in your backyard and organic waste. Some people turn the contents of their compost bin once or twice a year. This will help speed up the process but is not necessary. You do not need to turn your compost as long as you follow the bin layering instructions in this pamphlet. You may also need a couple of tools to harvest the compost, such as a hoe and shovel. Composting is an easy and sustainable practice to adopt in your home. It is not expensive or labor intensive.

www.geograph.com

This is one of the many kinds of compost bins available for backyard composting.

If you follow the instructions provided by Chemung County Soil and Water Conservation District, it won't smell or attract animals. Compost itself is a valuable resource for your home and garden. So check it out and see if it's something you could do!

Compost Facts

- Food and paper are the two largest contributors to landfill, and make up more than half of all landfill waste – more than all plastics, diapers, Styrofoam, and tires, COMBINED. Both food and paper can go into the compost
- Compost is organic – not a chemical fertilizer
- The average American produces 4 lbs of landfill waste every day – that's more than 87,000 lbs over a lifetime.

Source: www.smarthome.duke.edu

How do I start?

Choose your bin

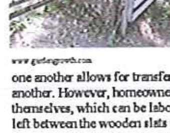
There are many kinds of compost bins. A more complete guide to compost systems is available through Chemung County Soil and Water Conservation District. Here are a couple of recommended bins:

www.show.com

Welded Wire – These are cheap and easy to use. You should purchase 11-12 feet of welded wire fence and assemble it in a circle. Bins should be about 3 feet in diameter and 3 feet tall. Use short lengths of wire, plastic-coated twist-ties, or nylon string to tie the cylinder closed. When the compost is full, untie the strings, pick up the bin, and move it to a new location to start up a new pile.

Plastic Bin – There are a variety of plastic compost bins for sale, for $20 - $150 per bin. These bins help maintain an aesthetic backyard and are simple to use. However, if you have a high volume of waste, this type of bin may be too small for you.

www.flickr.com



www.gardengrowth.com

Pallet Bin – These wooden bins can be very convenient for composting. They are often built with a removable side so that turning and harvesting compost is easy. Placing one or more adjacent to one another allows for transfer of compost from one bin to another. However, homeowners must construct these bins themselves, which can be labor intensive. Space must be left between the wooden slats to allow air to enter.

Compost Resources

What you need to start your very own bin

Where can I get the bin supplies I need?

Most hardware stores will sell the items you need, whether it's a plastic compost bin, wire, cable ties, or wood slats. The following are some places that may have what you need in Chemung County:

- Lowes
- Horseheads Do It Center
- A Cut Above
- Southern Tier Hardware
- Bulkhead Hardware Co.
- Value Homecenters, Inc.
- Tractor Supply Co.
- Banfield & Baker

What parts will I need for my bin and how much should they cost?

Wire Bin

Galvanized Wire: $8-20/roll
Holes 1" x 2" or smaller
3-4 feet tall
10-12 feet in circumference

Cable ties: $2-5/pack
6-8 needed to assemble bin

Plastic Bin

Bin: $25-100/unit
There are many kinds of plastic bins available. You can easily do an internet search to find product reviews and prices.

Pallet Bin

4 pallets of the same size (7 if you make two side-by-side bins): Free
- go to a local warehouse that ships and receives shipments. They will most likely have pallets you can take for free

4 L brackets, 2 strap hinges, a latch and the screws to attach the hardware: $10-20
For specific assembly information, check out Cornell Cooperative Extension's website or do a quick internet search.

My compost is having problems - how do I fix them?

Symptom	Problem	Solution
Pile components aren't heating up and breaking down	• Not enough water • Not enough nitrogen • Pile is too small • Particle size is too large	• Add water, move pile to shade, create lid for pile • Add more food scraps, grass clippings, other nitrogenous materials • Increase pile size to at least 3' by 3' by 3' • Cut materials to smaller size before putting them in the pile
Pile smells bad	• Too much water • Too much nitrogen • Not enough oxygen • Exposed food	• Add more dry carbon materials to the pile • Cover all nitrogenous materials with carbon - use layering technique • Turn the pile
Animals or insects are attracted to the pile	• Meat, dairy, or fatty foods are present in pile • Exposed food	• Make sure that fats, dairy, and meat are kept out of compost pile • Cover all nitrogenous materials with carbon – use layering technique

Who can I contact if I need help?

Cornell Cooperative Extension Chemung County
Phone: 607-734-4453
Chemung County SWCD
Phone: 607-739-2009
E-mail: dfiorentino@stny.rr.com
**** Chemung County SWCD is also selling plastic and wire compost bins** call for details**

Where can I find online information?

Cornell Cooperative Extension of Chemung County:
http://counties.cce.cornell.edu/chemung/index.htm
New York State Department of Environmental Conservation Home Composting Info: http://www.dec.ny.gov/25.html

What can go into the backyard compost pile?

YES:

- Leaves
- Sawdust
- Straw and hay
- Hair and fur
- Woodchips
- Yard waste
- Fireplace ashes (small amounts)
- Dryer and vacuum lint
- Nutshells
- Shredded paper scraps (white, pastel colored, cardboard, or newspaper)
- Vegetable and fruit waste
- Garden waste
- Eggshells
- Grass Clippings
- Coffee Grounds
- Tea bags
- Houseplants
- Cow or horse manure
- Weeds

NO:

- Meats
- Dairy
- Bones
- Oils, lards, fats
- Diseased plants
- Garden or yard waste treated with pesticides
- Pet waste (dog or cat)
- Coal or charcoal ash**
- Compostable plastics

Appendix I

Materials to use for vermicomposting lesson (particularly for children) – includes an outline and crossword puzzle.

Boy Scout Compost Presentation

1. What is compost?
   - Ask about leaves decomposing – what happens to them?
   - Explain decomposition – very basic
   - Show inputs – food scraps, newspaper, etc. and explain process
2. Why is compost good?
   - Minimize landfill
   - Helps garden
3. Worm composting
   - Show them a worm
   - Fun facts about worms
   - Bring in microscopes and have them look at worm under microscope?
   - Explain worm composting – worms eat food scraps and create castings
   - Castings = compost
4. Build a worm bin
   - Explain/talk about how to build a worm box
   - Assign kids to do specific things – tear newspaper, wet it, ring it out, put some dirt in the bottom, make holes in box
   - Feed worms food scraps
5. Follow up with word search
   - Give one gummy worm for every time they find 5 words

Compost Wordsearch

Circle the words that relate to what you learned about composting. Words may be vertical, horizontal, or diagonal.

A N C S O M U N D C I P B L A C W I S P O L R E W
Y E O R G A N I C F O B R G L J O N T S I B B I N
F V M O C O R N B H E A I R H O G E Z I N E W S S
W O P M S B L O G F L C V E P K N W V E G B L T H
S L O T T I N G I L H T O P S O I L F Y E T I M A
I N S D T O I S Y O B E A I L A D R E N L U D D B
A C T O S W V M I M A R D R E N D M U B R O A H I
N I E L V C E H A C E I R A L G E C K F S C L Z N
M U C X G O R M E N U A C K F R B W O N T A N B W
E L F I B H M A P L O R I N A C M E S T I M B C E
A F S A J U I R P U R I O C S P A W G P U S E I G
I E I C T F C S O S Q B M P A L D H M R A G R N Z
R A D K E Y O A U Y N Y C E F S T A H O K P V F Y
H C I L S U M C O T E T R X R K T B S T L W E D B
) D N H R A P I F R A I U E G O R I E O U N G R M
L G I A T E O I B E Q F L L C A B T N H P W E N C
E Y T O H I S M A O I G E H J Y U A Y G L I T A L
S K C U S H T L S W G D F G N M C T R A S G A T A
V E P O I E D A J I T E O R Y S I L C W L N B N L
N D I N R E T N W S A S O A N A M K E O M I L A I
T M G S H B L D R U Z R N V B L N U Y L S W E O E
I O F I U R E F E P L X W C H A O S I I U H S D T
A N A R T R A I B W O R M S Y U P E V G E S D O A
V I G B F E N L S O U S A O A B I O L O G Y H M K
O R E I G O V L Q H A R T P K E S F B S B N O X W

Word Bank

Compost
Vegetables
Worms
Biology
Food Scraps
Bedding
Vermicompost
Fruits
Red Wigglers
Fishing
Newspaper
Air holes
Bin
Topsoil
Landfill
Bacteria
Castings
Habitat
Organic
Recycle

Appendix J

Pet waste composting fact sheet.

Composting Your Pet's Waste

Prepared by Tom Shelley, May, 2009

WARNING: All animal wastes, especially the feces of all species, must be handled as hazardous materials. Great caution must be exercised in handing animal wastes, especially cat litter, and only those persons very familiar with the composting process should attempt to compost animal wastes.

Animal wastes, as with all organic materials, may be composted under the proper conditions.

When working with your pet's wastes use the appropriate precautions:

1. Wear disposable latex or vinyl gloves or use other gloves dedicated only for handing animal wastes.
2. If dusty materials are handled frequently wear a dust mask.
3. Wash your hands thoroughly after handling animal wastes, even if you wear gloves.

Site selection for your compost bin is very important. It is strongly recommended that only those who live in rural areas attempt to compost animal wastes. Site your animal waste compost bin(s) away from houses, gardens, wells, children's play areas, streams and any other environmentally sensitive areas.

Animal wastes are "greens" in our composting systems—they are *very* nitrogenous. They need to have more "browns" (carbon sources) added to the compost bin than most "greens", such as food scraps or plant trimmings. My recommendation is to add one part of course sawdust to one part of animal waste in the container in which the animal waste is collected prior to composing the wastes. For example, I collect my cat litter in a five gallon bucket and add the same volume of sawdust as I do kitty litter to the bucket. The sawdust also keeps down odors and prevents insects from infesting the collection bucket. When the bucket gets more or less full I take it out to the compost bin.

Use standard compost techniques to build and manage your compost bin. I recommend the welded wire bin. I make mine of one-half inch hardware cloth as I tend to have a lot of finer materials in my mix of animal wastes and browns. However, any standard welded wire fencing should work if the bin is properly constructed. Other types of bin construction should work as well.

Use the lasagna layering technique to manage your bin:

- A layer of sticks 6-8 inches thick on the bottom of the bin to allow air to go through the pile.
- Alternating layers of "browns", in a bowl shape, with layers of the litter—sawdust mix in the middle. No litter should be seen on the outside of the bin. A variety of browns

may be used—leaves, straw, shredded paper, dried plant materials.

- Do not allow the pile to become compacted. Air is a very important ingredient in any successful compost pile! If the pile becomes too dense, carefully turn the pile over, adding more browns as you go.
- Keep the pile damp but not soggy. Water is another important ingredient. Add water each time you add a batch of animal waste.

Animal wastes from pets can make great compost, however, it is strongly advised to use the finished compost only on non-food crops—flowers, trees, ornamental shrubs, etc.

Cat litter, in particular, is problematic. Some cat feces contain the protozoan parasite *Toxoplasma gondii,* which causes toxoplasmosis, a disease that can be fatal to infants (who acquire it congenitally from their mothers) and immune-system-deficient adults. Pregnant women should ***never*** handle cat litter or attempt to compost cat litter.

Only plant materials-based kitty litter should be used. Those brands of litter made from newsprint, wheat, corn, pine shavings or other organic materials should all compost well. For additional information on composting cat litter see "The Straight Poop on Kitty Litter," by Kristie Snyder, from a past issue of *Green Leaf*:

http://www.greenstar.coop/greenleaf/all-greenleaf-articles/the-straight-poop-on-kitty-litter.html

You may contact Tom Shelley by e-mail at tjs1@cornell.edu or by phone at 607 342-0864.

Appendix K

TreeSource Solutions Chip Supply Fact Sheet for the US Salt Boiler Project – Watkins Glen, New York.

TreeSource Solutions Chip Supply Fact Sheet for the US Salt Boiler Project – Watkins Glen, NY

TreeSource
Solutions, LLC
Harvesting Renewable Energy

Updated: March 30, 2009

Chip Supplier

TreeSource Solutions, LLC
Contact Information:
Jack Santamour
315-323-4882
jsantamour@treesourcesolutions.com

Anticipated Wood Receiving Dates

- **Round Wood:** May, 2009
- **Chips:** Tentative August, 2009

Round Wood

Location: Burdett, New York at 4039 Lake Avenue (New York State Route 79)
Hours: Fridays from 7AM-4PM or by special arrangement.
Payment: Check sent out the following Thursday.

Truck Configuration: Trucks must be self-unloading or dump unless other arrangements are made in advance of delivery.

Round Wood Specification (Paid Load)

- Species: Any
- Minimum Length: 8 feet
- Maximum Length: 24 feet
- Minimum Diameter: 2 inches
- Maximum Diameter: 20 inches
- Must Be delivered on self-unloader

Waste Wood (Free Load)

- TreeSource will accept brush that is free of garbage and lawn debris, and round wood outside the stated specification from landowners and Tree Services for no tipping fee from the supplier and no payment from TreeSource.
- **Note:** If a Load contains any Waste Wood not meeting the Round Wood Specification the entire load shall be treated as Waste Wood.

Chips

Specifications

1. Whole Tree Chips

Wood Chip Type	Maximum Size
All Species	2 inches

2. Urban Wood Waste and Mill Residuals

Chipped or Ground	Maximum Size
Non-painted/Non-treated wood	3 inches

In addition, Whole Tree Chips shall not include (i) ash, cinder or foreign materials (e.g., sand, metal, glass, chemicals, etc.) or (ii) Urban Wood Waste (as defined below). At least ninety-five percent (95%) of

each delivery by volume of wood chips must be less than the size specified under "Maximum Size" in every dimension, including length, width and diameter.

"Urban Wood Waste and Mill Residuals" shall mean wood that includes pieces generated during the manufacture or processing of wood products; the harvesting or processing of raw woody crops; the wood used in packaging and transportation, such as pallets; and all other "urban wood waste," as such term is generally defined under applicable industry standards.

Chips must be less than 60 days old in the summer months and less than 90 days in the winter months.

Chip Yard Hours -Monday through Friday 8AM to 8PM, alternative arrangements can be made for deliveries outside normal business hours

Chip Yard Equipment - A whole truck dumper will be employed to unload chip vans. The dumper manufacturer is Phelps Industries, Little Rock, Arkansas. The Model number is AX270FB63 with a 70 ft deck and 63 degrees maximum tilt angle and fixed backstop.

Steam Plant

The wood provided is used by US Salt to fuel a large industrial boiler that produces steam for its salt production process. It is one of the largest wood to energy facilities in New York State and a model for using local, renewable energy resources.

Inventory Goals

- Annual Total - 160,000 gt
- Round Wood- 15 days- 6600 gt
- Chips – 20 days- 8800 gt
- Daily Usage- 440 tons

Payment Terms

- Payment will be weekly. For loads delivered by Friday of any given week TreeSource Solutions will produce and mail a check and pay statement by Thursday of the following week.
- Round wood and Whole Tree Chips will be paid in green tons.
- Urban Wood Waste and Mill Residuals will be paid on a Dry Ton Basis. A sample will be taken from each load and dried to determine percent moisture for the load. The weight of the load will then be adjusted using the following formula:

$$\text{Bone Dry Tons (bdt)} = \text{Green tons (gton)} * \left(1 - \frac{\text{moisture content}}{\quad}\right)$$

Example:

Green Tons on a load = 30gtons

Moisture content = 40%

bdt = 30 * (1- 40/100) = 30 * 0.60 = 18 bdt

To Convert From Dollars per Dry Tons to Dollars per Greens Tons

$$\frac{\$}{\text{gton}} = \frac{\$}{\text{bdt}} * \left(1 - \frac{\text{moisture content}}{100}\right)$$

Example:

$/bdt= $47

Moisture Content= 40%

$$\frac{\$}{\text{gton}} = \frac{\$47}{\text{bdt}} * \left(1 - \frac{40}{100}\right)$$

$$\frac{\$}{\text{gton}} = \frac{\$47}{\text{bdt}} * 0.60 = \frac{\$28.20}{\text{gton}}$$

MEASUREMENT OF MOISTURE CONTENT

Methodology Summary

Moisture is determined by establishing the loss in weight of the sample when heated under controlled conditions of temperature, time and atmosphere, sample weight, and equipment specifications.

Apparatus

Drying Oven—For determining the moisture of wood, a commercial drying oven with openings for natural or forced air circulation and capable of temperature regulation of 217 ºF ± 3 will be used.

Open Containers, nonporous glass, metal, or ceramic and have a configuration so as to accommodate the test sample.

Preferred minimum volume of approximately 40 cubic inches (e.g., 4" ∅ x 2" height metal cup).

Sampling

Sampling Point—Take the sample where the wood is being unloaded from transport van, truck, and chip trailer or when discharged from dump bin or nearby conveyors.

> *NOTE —Samples collected from the surface of piles (including the rear area of trailers) are, in general, unreliable because of the exposure to the environment. If necessary, collect nine increments from a foot or more below the surface at nine points covering the wood.*

Collection of Gross Sample—Collect increments regularly, systematically, and with such frequency that the entire quantity of wood sampled will be represented proportionally in the gross sample.

The quantity of the sample shall be large enough to be representative but not less than 300 g (one plastic baggie).

Place the samples in an airtight container (such as a reusable plastic baggie) immediately after collection. Maintain the samples in the airtight container whenever possible to prevent gains or losses in moisture from the atmosphere.

Use a dry, clean sample container weighed to the nearest 0.02 g and record as container weight, *W*c. Place a minimum of 100 g ± 30 of sample in the container, weigh the sample and container to the nearest 0.01 g, and record as initial weight, *W*i.

Place the sample and container in the oven for 12 hrs at 217 °F.

Remove the sample and the container from the oven and cool to room temperature. When cool enough to handle safely, immediately weigh to the nearest 0.01 g, and record the weight, *W*f.

Calculation

Calculate the percent moisture in the analysis sample as follows:

Moisture in analysis sample = [(*W*i – *W*f) / (*W*i – *W*c)] * 100, as percent (%)

where:

*W*c = container weight, g,

*W*i = initial weight, g, and

*W*f = final weight, g.

Appendix D

Markets Discussion

DESCRIPTION OF RECYCLABLE MATERIALS AND POTENTIAL MARKETS

Due to the high capital investment needed to build a state-of-the-art zero sort processing facility, Chemung and NEWSNY have chosen to utilize the existing MRF to consolidate recyclable materials collected within the County and transfer the raw materials to the Ontario County Zero-Sort® Facility in Stanley, New York. Materials are aggregated with other materials from the region. The benefit of aggregating, combined with state-of-the-art technology maximizes recovery and minimizes residue. Included with the shift to single stream was the increased ability to add plastics numbered 3-7 to the list of acceptable commodities. Prior to the change to single stream recycling only plastics numbered 1 and 2 were accepted for recycling.

Currently, material shipped to the Ontario County Zero-Sort® Facility is sold primarily to domestic markets with a lesser volume sold internationally. NEWSNY audits outlets for legitimate business practice and end uses.

Due to the competitive nature of recycling markets, specific outlets are not listed in this Plan because NEWSNY considers these markets proprietary and confidential business information. NEWSNY's operations of several MRFs located throughout the State and New England means that they have more associated tonnage to leverage. This increased volume gives them an expanded ability to market these materials.

Although the County relies on the expertise of a contractor to operate the County owned facilities, it also supports both municipal and private industry development for collection, processing and market opportunities of all recoverable materials and monitors the general markets for recyclables, the descriptions below identify current markets for recyclables that are collected at the Chemung County MRF.

PAPER

Paper has a long lifespan and can be recycled several times before finally breaking down into pulp too small to use. Paper products currently make up about 40 percent of solid waste in the U.S. Still, recycled paper is attractive to all parts of the market. Companies use less energy and fewer resources when using paper made from recycled materials, and consumers, in turn, benefit from those savings. In 2007, 56 percent of the paper used in the U.S. was recovered for recycling. That equates to an average of 360 pounds of paper recovered per person in the United States. Because of this high recovery rate, the paper industry set a new goal of a 60 percent recovery rate by 2012.[1]

[1] Source: http://earth911.com

- **Corrugated Cardboard:** It is comprised of corrugated fiber paper, sandwiched by sturdy sheets of cardboard. Once this cardboard has been deposited into the trash or recycling bin, it is referred to as old corrugated cardboard, or OCC. Corrugated cardboard is used to make boxes and other containers for shipping materials. When not wet or contaminated with food or oil, cardboard is recyclable. It is also naturally biodegradable. If the cardboard has a waxy coating, then it may need to be thrown out.
- **Paperboard:** Paperboard, also called boxboard or chipboard, is flat, stiff, and often coated to give a glossy appearance. Examples include drink boxes, cereal containers, detergent packaging, shoe boxes and tissue containers. Recycled paperboard represents one of the largest markets for recycled paper in the United States. Paperboard is recycled using a single-grade process, meaning no other type of paper is mixed in during manufacturing.
- **Brown Bags:** Brown bags are dispersed at grocery, fast food, and other stores for containing purchases. Brown bags may be recycled.
- **High Grade Paper:** This category includes computer paper, ledger paper, envelopes, copy paper, and notebook paper. Computer paper, which is made primarily from hardwood trees like oak and maple, is one of the most prevalent and easy-to-recycle types of paper made today. [1] It can be recycled between five and seven times before it is no longer usable and is commonly converted to printing paper, writing paper, and tissues products (paper towels, napkins, and toilet paper). It is easily recyclable and is accepted by most vendors and paper mills.
- **Newspaper:** This paper category consists of used or unsold newspapers and may included coated advertisement inserts. Newspapers are recycled into a number of products. One of the most common is new newsprint. According to the Newspaper Association of America (NAA), the average newspaper contains 30 percent recycled fiber content. Newspapers are also recycled into other products, since it is often more cost-effective to recycle them locally, rather than ship them to distant mills for recycling into new newsprint. According to the NAA, newspaper is often recycled into:

    - Cereal Boxes
    - Egg Cartons
    - Pencil Barrels
    - Grocery Bags
    - Tissue Paper
    - Cellulose Insulation Materials

- **Other Paper:** This category includes a variety of paper products from a multitude of sources including homes and offices. Paper products include uncontaminated food packaging, cereal boxes, magazines, and junk mail. Mixed papers can be recycled as roofing felt and construction board. The demand for other, or mixed,

paper is lower than for other grades of paper. A large percentage of this category is exported to other countries.

- **Magazines:** This category includes all types of magazines, including coated paper and stapled bindings. Because magazines and catalogs tend to contain more ink, they often undergo a different recycling process than office and other types of paper. Typically, the recycled content of newspaper stock will be 70 percent old newspapers and 30 percent old magazines. An alternative to recycling magazines is donating them to be reused.

LOCAL MARKETS FOR SPECIALIZED RECOVERED RECYCLABLES

PAPER

Southern Tier Industries

711 Sullivan Street

Elmira, NY 14901

(607) 734-6151

Fox Run Recycling, Inc.

12 North Park Street

Seneca Falls, NY 13148

Seneca County

http://www.foxrunrecycling.com/

Specifics: corrugated cardboard, newspaper, 1 and 2 plastics, tin

Business Type: Recyclables broker

METALS

Steel is the most recycled material in North America, and it can be infinitely recycled and turned into new steel products. Aluminum cans are the most valuable beverage containers to recycle and are the most recycled consumer product in the United States today.

- **Ferrous Metals:** Ferrous metals are metals derived from, or containing, iron. Steel is the most common of these metals, including alloys such as stainless steel. The most common objects containing ferrous metals are food cans (made of steel and/or tin), automobile parts, household appliances (aka “white goods”), and construction beams. Ferrous metals can also be found in broken tools, small household appliances, toys, and residue from magnetic cleansers in a composting facility.

- **Aluminum Cans:** The aluminum can is the most valuable beverage container to recycle. Aluminum is a durable and sustainable metal: two-thirds of the aluminum ever produced is still in use today.
- **Aluminum Foil:** Aluminum is durable and can be reused over and over again. Aluminum foil is technically just as recyclable as aluminum cans, but the challenge is that aluminum foil is often dirtier, thus making it harder to recycle.
- **Furniture:** This includes discarded aluminum and other non-ferrous furnishings from homes, office, and institutions. Aluminum furniture is recyclable through scrap metal dealers, may be donated, or sold second-hand.
- **Structural:** Structural non-ferrous items include aluminum auto parts, housing and mobile home components not discarded as C & D and other substantially heavy non-ferrous items. These may be recycled at local scrap dealers.
- **Housewares:** Non-ferrous housewares include discarded aluminum tools (snow shovels, rakes, wrenches), wiring not discarded as C&D, aluminum appliances, and toys. These may be recycled at local scrap dealers. Housewares may be recyclable through scrap metal dealers, may be donated, or sold second-hand.

LOCAL MARKETS FOR SPECIALIZED RECOVERED RECYCLABLES

METAL

Kaplan's Scrapyard Inc.

104 E Woodlawn Avenue

Elmira, NY 14901

(607) 733-6531

W.M. Spiegel & Sons

461 E Clinton Street

Elmira, NY 14901

(607) 732-4444

Shulman Company

197 E Washington Avenue

Elmira, NY 14901

(607) 733-7111

Becks Recycling

982 State Route 21

Shortsville, NY

Ontario County

http://www.becksrecycling.com

Specifics: Scrap metals (industry, auto wreckers, municipalities, demolition contractors, farms, scrap yards, bridge contractors)

Business Type: Purchases, Processor

GLASS

Glass is made of four basic ingredients: sand, soda ash, limestone, and, depending on the type, colorants. Once a glass container has been colored it cannot be made into a different color. Glass is one of the most popular materials recycled today, both because of the purity of the ingredients and the quick turnaround of recycling. Similar

to paper, glass comes in a variety of colors, which comes into play in the recycling process. Glass can be recycled indefinitely and not lose its quality. About nine in ten glass containers are recycled to produce more glass containers. What isn't used typically ends up as decorative kitchen tile, insulation or even as road building material. High-quality purified crushed glass (aka cullet) will be used to make glass containers, abrasives, fiberglass or beads. Lower quality cullet may be used as insulation, road aggregate or decorative tile.

- **Amber/Brown Glass:** Nickel, sulfur and carbon are added to molten glass during manufacturing to give it a brown color. The most common use for brown glass is the production of beer bottles. The amber tint reflect ultraviolet light and protects the product inside from direct sunlight, thus preserving freshness and flavor.
- **Green Glass:** Green glass is colored by adding metals such as iron, chromium or copper to the molten glass during production. Green glass has more variety of shades than any other color, making it a popular color choice for bottles. It also helps keeps sunlight and temperature from affecting the contents inside.
- **Clear Glass:** Clear (aka colorless) glass is most often made of a combination of silica (sand) and other substances. It is most often used to store solid materials, but is also used for beverages.
- **Flat Class:** Flat glass includes all types of household window glass and mirrors. It can be considered a contaminant to container glass recycling.
- **Other Glass:** This category includes all other glass which has not been included in the above categories. Items in this category include glass cookware, electrical insulators, ceramic household and automotive items, automotive glass, etc. This type of glass can be used as an aggregate and filler in asphalt.

LOCAL MARKETS FOR SPECIALIZED RECOVERED RECYCLABLES

GLASS

No viable markets exist at this time.

Specifics: Glass (color-sorted containers, color mixed containers)

Business Type: Collector/Hauler; Processor

PLASTICS

Plastics are denoted by number; each number represents the *type of resin* made to produce the plastic. These numbers are plastic #1, #2, #3, #4, #5, #6 and #7. Because each resin is different, these numbers affect how and where you can recycle plastics. The Americna Chemistry Council distinguishes between the follow plastics.

- **Polyethylene Terephthalate (PET) #1:** PET is clear, tough, and has good gas and moisture barrier properties. This resin is commonly used in beverage bottles and many injection-molded consumer product containers. Cleaned, recycled PET flakes and pellets are in great demand for spinning fiber for carpet yards, producing fiberfill and geotextiles.
- **High Density Polyethylene (HDPE) #2:** HDPE is used to make many types of bottles, including those for milk, water, juice, cosmetics, shampoo, dish and laundry detergents, and household cleaners. It is also used to make plastic shopping bags, cereal box liners, and reusable shipping containers. Recycled HDPE can be used to make the aforementioned types of bottles, plastic lumber, piping, floor tiles, buckets, crates, flower pots, film, and recycling bins.
- **Polyvinyl Chloride (PVC, Vinyl) #3:** Plastic #3 has a resistance to grease, oil, and chemicals and has high impact strength. When recycled, it can be used in for a variety of construction purposes (e.g. piping, decking, fencing, paneling, gutters, carpet backing, floor tiles and mats, resilient flooring, electrical boxes, cables), mud flaps, traffic cones, garden houses, and mobile home skirting.
- **Low Density Polyethylene (LDPE) #4:** LDPE is used predominantly in film applications due to its toughness, flexibility and relative transparency. It can be found in such products as bags for dry cleaning, newspapers, bread, frozen foods, fresh produce, and household garbage; shrink wrap, container lids, squeezable bottles, and coatings for paper milk cartons and hot and cold beverage cups. When recycled, the byproduct can be used to manufacture shipping envelopes, garbage can liners, floor tine, paneling, furniture, film and sheet, compost bins, trash cans, landscape timber, and outdoor lumber.
- **Polypropylene (PP) #5:** PP has good chemical resistance, is strong and has a high melting point, making it good for hot-fill liquids. This resin is found in flexible and rigid packaging, fibers, and large molded parts for automotive and consumer products. When recycled, PP's byproduct can be used to manufacture automobile applications (e.g. battery cases, signal lights, battery cables, brooms and brushes, ice scrapers, oil funnels, and bicycle racks), garden rakes, storage bins, shipping pallets, sheeting, and trays.
- **Polystyrene (PS) #6:** Typical applications include protective packaging, foodservice packaging, bottles, and food containers. When recycled, PS's byproduct can be used to manufacture thermal insulation, thermometers, light switch plates, vents, desk trays, rulers, license plate frames, cameras or video cassette casings, foamed foodservice applications, plastic mouldings, and expandable polystyrene foam protective packaging.

- **Other #7:** Use of this code indicates that a package is made with a resin other than the six listed above or is made of more than one resin and used in a multi-layer combination. This is commonly found in three-and five-gallon reusable water bottles, some citrus juice and catsup bottles, oven-baking bags, and custom package. The recycled contents may be used in bottles and plastic lumber applications.

LOCAL MARKETS FOR SPECIALIZED RECOVERED RECYCLABLES

PLASTICS

Kaplan Container

130 Despatch Drive

East Rochester, NY

Monroe County

www.kaplancontainer.com

Specifics: Plastics (1,2,3,4,5,6, film, engineered plastics)

Business Type: Processor

Minimum amount required for Business: 10 tons

ELECTRONICS

Electronics have the potential to cause the most environmental damage because of their hazardous ingredients. Electronic Waste (aka E-waste) is growing at three times the rate of other municipal waste. Although e-waste accounts for only 1 to 4 percent of municipal waste, it may be responsible for as much as 70 percent of the heavy metals in landfills, including 40 percent of all lead. E-waste contains materials such as glass, copper, aluminum, plastic and other components can often be extracted and reused.

The United States Postal Service and Clover Technologies partnered to provide consumers with free postage for the recycling of certain small electronic devices. Customers can pick up envelopes in 1,500 Post Offices. Clover will pay the postage on these items in the hopes they can be refurbished. If not, the components will be recycled. Items that can be recycled include: Inkjet cartridges; PDAs; Blackberries; digital cameras; iPods, and MP3 players.

- **Cell Phones:** The usage of cell phones has increased astronomically since they were first made available to the public in 1984. According to a study by Strategy Analytics, 1.1 billion cell phones were sold in 2007. If disposed of improperly, cell phones can pollute the surrounding soil and water because they contain toxic materials such as arsenic and zinc. When recycled, some cell phones are broken down into their raw materials. Other are refurbished and

sent to other countries for purchase in consumer markets. There are several nation cell phone recycling programs: Motorola, Nokia, Call2Recycle, National Coalition Against Domestic Violence, Call to Protect, Verizon Wireless, AT&T Wireless, T-Mobile Wireless, Sprint Wireless.

- **Televisions:** The U.S. EPA estimates that 82 percent of televisions, or 20.6 million units, were disposed of, primarily in landfills, between 2006 and 2007. That means only 18 percent, or 6.3 million units, were recycled. Televisions contain hazardous materials (most notably lead) that can leach out of landfills over time. Many areas have banned televisions from landfills because of the hazards of lead leachate.
- **MP3 Players:** The batteries and other parts of most MP3 devices can be recycled or returned to most manufacturers, free of charge.
- **CDs and DVDs:** There are three main components to consider when recycling CDs and DVDs as each is made of different materials. Cover and Liner Notes are generally made from paper and relatively easy to recycle. Discs contain plastics, metals, and ink. Discs are made mostly from polycarbonate, although a small amount of lacquer is also used as a protective coating. Aluminum in the primary metal in discs, but traces of gold, silver and nickel are also present. The dyes used in printing on the disc itself contain some petroleum products, but when it comes to recycling, only metal and plastic are processed. *Jewel Cases* are generally made of plastic #6, a cheap, but hard-to-recycle materials. Of the three components, jewel cases are generally the most difficult to recycle.
- **Video Games:** Many of the most common video game consoles contain hazardous chemicals and materials such as polyvinyl chloride (PVC); phthalates, beryllium, and bromine. The consoles also contain circuit boards like hard drives, which contain lead that can leach out of landfills and into the water supply.
- **Inkjet Cartridges:** The average toner cartridge is composed of 40 percent plastic, 40 percent metal, and smaller amounts of rubber, paper, foam, and toner. Many companies now pay for used cartridges which they remanufacture and resell. Local office supply stores often offer incentives to recycle cartridges, such as returning a cartridge in exchange for a ream of paper. Collection is inkjet cartridges can also be used as a fundraiser. E-waste drop-offs also often accept used printer cartridges.
- **Computers:** Computers are a primary contributor to electronic waste (e-waste), posing a major disposal issue because they are made up of various components that are toxic to the environment. The Institute for Local Self-Reliance estimates that 75 percent of obsolete electronics are currently stored, but with continued innovations in technology, there is an increasing opportunity to recycle computers, limiting the number that end up in landfills.
- **Computer Monitors:** Computer monitors are made of plastic, glass and metal. Some also can contain lead, from the color cathode ray tube (CRT), which creates the images on the screen.

LOCAL MARKETS FOR SPECIALIZED RECOVERED RECYCLABLES

ELECTRONICS

Lake Street Transfer Station

7 am – 3:30 pm Monday through Friday, and Saturdays, 7 am to noon.

REACT E-Cycling Inc.
225 Colonial Drive (near the Arnot Mall)
Horseheads, NY 14845

Accepts televisions and computer components, as well as VCR & DVD players, fax machines, gaming consoles, IPODS and MP3 players

Monday through Friday from 8 am – 9:30 am, 9:45 am – noon, 12:30 pm – 2:00 pm and 2:15 pm – 3:00 pm.

All items are accepted free of charge. Call 607-739-8401 with questions. All television and computer monitors must be intact.

CONSTRUCTION AND DEMOLITION DEBRIS

Construction and Demolition Debris (C & D) is comprised of uncontaminated waste generated from construction and remodeling projects and the repair and demolition of structures and roads. It also includes vegetation and brush from land clearing, utility line maintenance, and seasonal and storm related clean-up. C & D waste includes rubble such as bricks, concrete, and other masonry materials, soil and rock; wood based materials such as pallets, stumps and tree parts from land clearing, framing and siding lumber from construction projects and treated wood; and mixed C & D materials such as wall coverings, plaster, sheetrock, gypsum, and drywall, plumbing fixtures, non-asbestos insulation, roofing shingles, ferrous and non-ferrous metals, plastics, glass, and corrugated cardboard.

- **Wood:** Wood is the only 100 percent renewable, recyclable, reusable and biodegradable resource. Beyond typical household reuse, recycled wood can become a number of products, such as lumber, engineered wood products, mulch or compost feedstock, biomass fuel and other miscellaneous items such as animal bedding or wood flour.
- **Brick:** Unused brick can be recycled. New brick that fails to meet the manufacturers' standards can be recycled through a crushing process, creating

"**brick chips**." Those brick chips can be used as a landscape material, or can be reground through the manufacturing process to create new, quality brick.

- **Carpet:** There are many different kinds of carpet, and nearly all are recyclable. Depending on the face fiber, carpet can be broken down and used to make a new product. It may be used to make composite lumber, tile backer board, roofing shingles, railroad ties, automotive parts or carpet cushion. That said, according to the Carpet America Recovery Effort (CARE), carpet is difficult to recycle because of the many substances that constitute it. For example, in a typical carpet, the two main components are the face fiber and the backing system. The face fiber is what you see and walk on, is the most valuable portion of the carpet for recycling and is typically made of:

  - Nylon 6,6
  - Nylon
  - Polypropylene (also called "olefin")
  - Polyester

  The second portion of the carpet structure is the backing system. The most common types of backing are:

  - Polyvinylchloride (PVC) – Primarily used in the commercial sector
  - Latex – Typically used in residences

  Backing also contains:

  - Additional layers – Such as polypropylene
  - Fillers – Such as calcium carbonate

  Because of this complex system and the numerous substances within it, recycling carpeting is difficult and often comes at a charge to cover the steps involved, such as separation, shredding and handling.

- **Carpet Padding:** Carpet padding is installed beneath carpet to protect and increase the life of the carpet. It serves as both an insulator and sound dampener and comes in several different styles. Although there are various thicknesses and densities in each, the three broad categories of carpet padding are fiber, rubber and foam. 1) *Fiber.* In this padding, natural fibers, such as wool or jute, or synthetic fibers such as nylon and polyester, are woven together into a pad that resembles a sheet of felt. These types of pads are made from new and recycled materials. Though jute is not recyclable, it does biodegrade and is plentiful. 2) *Rubber*. Rubber padding providers more cushion than fiber padding, and it is more resistant to moisture and odors. Rubber padding is also made from new and recycled materials. 3) *Foam.* Today, foam comprises nearly 90 percent of all carpet padding produced and solid in the United States. The main reason for this is the ease in which foam padding can be recycled. When carpet pads are recycled, they are collected, cleaned, chopped up and combined with post-industrial foam scrap to create what is known as bonded foam (or rebond). Rebond contains scrap foam from furniture, bedding, and automobile manufacturers.

- **Gypsum Drywall:** Gypsum drywall is the primary material used for interior walls in the construction of houses in the U.S. It is made up of gypsum covered on both sides by paper. Gypsum itself is a naturally occurring rock. Some other commonly known names for drywall are gypsum board, wallboard, plasterboard, gypboard and sheetrock. Gypsum is recyclable. It has also been shown to be a useful soil amendment because it improves water penetration, softens soil with a high level of clay content, neutralizes soil acidity, and adds nutrients such as calcium and sulfur. It is being used in general agriculture; mushroom growing; forestry and mine reclamation; nurseries; parks and recreation area, residential laws, golf courses, and in compost as an additive.
- **Linoleum:** Linoleum is a type of floor covering most often made from solidified linseed oil that is combined with wood flour or cork dust. This mixture is then used to cover burlap or canvas, in turn creating linoleum. Linoleum manufacturers feed all scrap materials back into the production line, virtually eliminating all waste. It is incorrectly referred to as vinyl flooring, but it is actually comprised of all natural materials. Natural linoleum can be composted or landfilled because it is biodegradable. When properly prepared into smaller pieces, and in the presence of suitable conditions with proper minerals, linoleum decomposes. This releases carbon, which can then be used by various forms of microbes and fungi, creating healthy and organic compost for your garden or lawn. Alternately, linoleum can be used as fuel, since it produces energy equivalent to coal and releases the same amount of carbon which its natural constituents absorb.
- **Pallets:** Pallets are made from several materials.
  - *Softwoods*, the most common type of pallet, are the cheapest to create and are often considered to be “expendable” – meaning they end up in the trash once they reach their destination.
  - *Hardwood* pallets and those made of plastic or metal are slightly more expensive and end up being resold or returned to the sender once the load has been delivered.
  - Made of *polyvinyl chloride* (PVC) and high density polyethylene (HDPE), plastic pallets account for approximately two percent of those made. They cost more but are more durable than wooden pallets.
  - *Metal* pallets, typically made from steel or aluminum, make up less than one percent of the pallet market but are best used for transporting hazardous waste.
  - New to the industry in the past 15 years are *paper* pallets, which are made from corrugated cardboard and molded wood pulp, making them much lighter than other types of pallets.

  Due to the cost, pallets made from plastic, metal and some hardwoods, are typically resold or returned to the sender when the product is unloaded. Once returned, they can be reused or recycled through various recycling companies. For cheaper softwood pallets, recycling is the best option. According to the Virginia Tech Center for Forest Products Marketing, nearly 170 million wood

pallets are repaired and recycled each year. When wooden pallets are no longer useful, they can be recycled into mulch for landscapes; fuel pellets; pressed logs; composting agent to increase air flow and decomposition; pet bedding; and medium density fiberboard.

LOCAL MARKETS FOR SPECIALIZED RECOVERED RECYCLABLES

CONSTRUCTION & DEMOLITION DEBRIS, WOOD

Pioneer Millworks

1180 Commercial Drive

Farmington, NY

Ontario County

WWW.PIONEERMILLWORKS.COM

Specifics: C & D(clean wood, uses reclaimed and sustainable wood in the form of timbers, joists, and boards for resuse and remanufacturing); Reusable/Salvageable (building materials)

Business Type: Processor/ReManufacturer; Reuse/Materials Exchanges

Amount of Material handled per month: 120,00 board feet per month

Minimum amount required for Business: prefer truckload quantities

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Flower City HFH Restore

755 Culver Road

Rochester, NY

Monroe County

www.rochesterhabitat.org

Specifics: Reusable Salvageable (equipment/appliances; furniture; building materials; architectural salvage; paints/coatings); Other (cabinets, doors, flooring, furniture, hardware, heaters, lighting, fans, plumbing, wall coverings, windows)

Business Type: Reuse/Materials Exchanges

LOCAL MARKETS FOR SPECIALIZED RECOVERED RECYCLABLES

CONSTRUCTION & DEMOLITION DEBRIS, WOOD CON'T

GP Land and Carpet Corporation

5905 Lake Road South

Rochester, NY

Monroe County

www.gpcarpet.com

Specifics: Carpet (nylon, polypropylene, carpet tile, commercial carpet only). operates a joint venture with Conigliaros in Massachusettes to turn grind carpet and mix it with concrete to form concrete blocks for construction. Also sella carpet with recycled content

Business Type: Collector/Hauler; Processor; ReManufacturer

Amount of Material handled per month: 3,000 square yards.

Minimum amount required for Business: 300 square yards minimum

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Ongweoweh Corp

767 Warren Road

Ithaca, NY 14852

Tompkins County

http://www.ongweoweh.com/

Specifics: distributing, managing, recovering, and recycling more than 17 million pallets

Business Type: Distributor, Manager, Recovery of Pallets

AUTOMOTIVE

- **Tires:** Rubber is difficult to recycle due to the procedure known as "vulcanization," which it undergoes to attain its springy, flexible nature. Vulcanization is a curing process that involves adding sulfur to rubber, which creates stronger bonds between the rubber polymers. Due to the vulcanization method, tires are difficult to melt for reuse and are therefore typically broken

down by a mechanical process. According to the Rubber Manufacturer's Association, there are three main uses for scrap tires. 1) *Tire-derived Fuel (TDF)* utilizes granulated, tires in the place of traditional fuels in cement kilns, pulp and paper factories, electric utilities and various boilers. TDF is not considered to be genuine recycling, but accounts for an estimated 52 percent of all scrap tires. 2) *Civil Engineering*. Recycled scrap tires play a meaningful role in civil engineering processes, consuming 16 percent of the scrap tire available in 2005. Tire shreds are cost-effective substitutes for traditional materials when they are used to stabilize weak soil, such as constructing road embankments or as a subgrade (below the ground level of a project) fill. Additionally, tire shreds provide effective subgrade insulation for roads, walls and bridge abutments. 3) *Ground Rubber* or "crumb" rubber, is being used to a greater extent in many states in rubberized asphalt applications and is the largest single use of recycled rubber. Its benefits include noise reduction, shorter breaking distances, reduced road maintenance and more cost-effective, durable road surfaces. Ground rubber also serves a number of sports and recreational purposes. Used in shock-absorbing running tracks and ground cover under playgrounds, the springy and responsive nature of rubber decreases the impact of running or falling. Also added to soil under playing fields, crumb rubber improves drainage and root structure of grass. Ground rubber applications accounted for 12 percent of scrap tire use in 2005.

- **Car Fluids**: Car fluids include oil, transmission fluid, coolant, power steering fluid, and brake fluid. Most of these fluids can be recycled, and depending on specifics, this process can cost significantly less than manufacturing new products. There are three basic methods for recycling motor oil. 1) *Re-refining*. Motor oil is treated to remove impurities and distilled to "base oil," which, with additives, can be re-refined to produce lubricants, including motor oil, transmission fluid and grease. 2) *Reconditioning*. Impurities are removed through a filtration process and in some cases this less pure oil can be used again. 3) *Reuse or reprocessing*. Many used motor oils or used industrial lubricants can also be used as a heating and energy source for industrial boilers, power plants or combustion facilities. If they cannot be used "as-is," they can often be reprocessed to remove certain impurities and then used as a fuel. Antifreeze often can be recycled at an auto repair shop equipped with the proper filtration or distillation technology. Contaminants such as oils and heavy metals are removed from the antifreeze through a variety of methods such as include filtration, distillation, reverse osmosis and ion exchange. The antifreeze is restored to "new" antifreeze by adding chemicals that stabilize the fluid and make it more resistant to breakdown. Transmission fluid, power steering fluid and gear oil can also be recycled, reconditioned or reused through similar processes.
- **Auto Bodies:** According to the Motor and Equipment Manufactures Association, over 76 percent of each scrap automobile is recycled. Almost all the iron and steel of a car is recovered when recycled or reused, as well as lead, aluminum and copper. Recycling of most automobiles begin at auto salvage dealers, who remove reusable or resalable parts, drain fluids, and

flatten the remaining components. After being delivered to a scrap yard, the crushed vehicle is separated into three streams: iron and steel, nonferrous metal, and non-metallic scrap. The non-metallic scrap is typically sent to land fills and the remainder is shredded into smaller pieces of various materials before being shipped to respective end markets.

- **Car Batteries:** Automotive batteries (lead-acid batteries) are generally made up of a hard rubber or plastic case, lead and an electrolyte solution. Car batteries are the single most recycled product in the United States; According to the U.S. EPA, 99 percent of automobile batteries were recycled in 2006. Most individuals return their old car batteries to the dealership or the store where they are purchasing their replacement. Additionally, each year the American Automobile Association sponsors the AAA Great Battery Round Up, during which they set up collection sites for dead car batteries and perform free automobile battery checks; this is usually held in correspondence with Earth Day. If the case of the battery is polypropylene, it is typically returned to a battery manufacturer to become new covers and cases. If the case is rubber is can be recycled with the lead smelting process as a carbon source. The recycled lead is used for new plates in batteries. Lead oxide can also be reused in the manufacturing process to create new battery units. The sodium sulfate solution can be reused in a variety of manufacturing processes, including glass, textiles, and laundry detergents. It can also be treated and reused in new battery manufacturing.
- **Auto Parts:** This category includes products such as the windshield, brake pads, oil filter, seat covers, and floor mats. Windshields/Auto glass may be recycled into asphalt filler, fiberglass, glass beads, reflective additive, architectural aggregate, ground for abrasives, backing to carpet, and a line of products (e.g. wine glass, counter tops, glass lamps). Oil Filters (steel) may be recycled into cans, household appliances, construction materials, flat-rolled steel sheets, concrete reinforcement, structural beams, new car parts, and new oil filters. Polyurethane products such as floor mats and truck bed liners can be used to produce new foam, padding products, or tire covers. Wheels and wheel covers can be resold as used parts or reformed into other metal parts. Car seats can be dismantled and fed into the standard metal, plastic, and foam recycling processes.

LOCAL MARKETS FOR SPECIALIZED RECOVERED RECYCLABLES

RUBBER

ENVIROForm Recycled Products, Inc.

P.O. Box 553

Geneva, NY

Ontario County

www.enviroform.com

Specifics: Tire Crumb, manufactures parking lot signs, wheel chocks, speed pumps, dock bumpers, mats, flooring

Business Type: End-user/Manufacturer

Amount of Material handled per month: 80,000 - 100,000 tons

Minimum amount required for Business: Roll-off container or semi-trailer load. Uses crumb rubber to manufacture a variety of products.

Parmenter, Inc.

1800 State Route 14N

Geneva, NY

Ontario County

www.feherrubbish.com

Specifics: Tires (retreads, commercial tires only)

Business Type: ReManufacturer

Minimum amount required for Business: 1 tire

HOUSEHOLD

- **Food:** One of the largest contributors to home-based composting piles is kitchen waste. Scraps from meal preparations as well as cooking supplies can be added to a compost bin and contribute nutrients to soil and mulch. Composting guides generally sort matter into two categories, according to what they contribute to the process: green (nitrogen) and brown (carbon).
- **Cooking Oil**: Cooking oil is defined as “purified fat of plant or animal origin.” It is mainly used when frying and sautéing, as well as in baked goods and salad

dressings. Biodiesel is a biodegradable and nontoxic fuel that can be made from various forms of cooking oil.

- **Light Bulbs:** There are many types of bulbs.
  - *Tube-style Fluorescent Lamps.* Commonly used as overhead lighting in office buildings, these lamps also come in compact shapes for a variety of other uses for both the home and office.
  - *Compact Fluorescent Lamps (CFLs).* CFLs are smaller versions of the standard tube-style fluorescent lamps and can be used in place of standard incandescent lamps. CFLs are more energy efficient and last longer than incandescent lamps. These lamps contain levels of mercury that require proper disposal and special cleanup if broken.
  - *Mercury Vapor Lamps*: These are the original high-intensity discharge (HID) lamps with blue/white light. They were originally designed for farmyard lighting.
  - *Metal Halide Lamps*: These are newer, more efficient HID lights found in homes, businesses and institutions. They are also used for headlights and can be spotted by their bright, blue-tinted light.
  - *High-Pressure Sodium-Vapor Lamps*: These lamps generate white-yellow light used for street lamps and outdoor security lighting.
  - *Ultraviolet Lamps*: Typically used in water and air purifiers for germicidal purposes, these lamps are also used in some tanning salons.

  With lamps such as compact fluorescent lamps (CFLs), mercury content needs to be taken into consideration before disposal. The United States Postal Service has a partnership with OSRAM SYLVANIA to allow consumers to shipped use compact fluorescent lightbulbs to be recycled. http://earth911.com/news/2007/12/06/sylvania-continues-lamp-recycling-program-with-us-postal-service/

  Fluorescent lamps are well suited for recycling due to the substances from which they are made. Each part (mercury and calcium phosphate) can be reused to make new lamps or other products. The aluminum used to manufacture the end-caps for lamps are used to make new end-caps and other aluminum products.

- **Clothing and Textile**: Textiles can be recycled into sandbags, geotextiles, wiping rags, and new fabrics.
- **Mattresses:** Mattresses can be a challenge to recycle because of their size, but if they are broken down and separated, the materials can be reused. Metal springs can be melted down and sold to steel companies. The cotton and foam are bought by companies who use it for carpet bagging or insulation. The wood is commonly sold to wood chippers or burnt for fuel.

LOCAL MARKETS FOR SPECIALIZED RECOVERED RECYCLABLES

ORGANICS AND PUTRESCIBLES

Southern Tier Hide & Tallow

3385 Lower Map Avenue #1

Elmira, NY

(607) 734-3661

Baker Commodities

2268 Browncroft Blvd.

Rochester, NY

Monroe County

www.bakercommodities.com

Specifics: Organics (bones and meat, grease/oil)

Business Type: Collector/Hauler; Processor; ReManufacturer

Foodlink

936 Exchange Street

Rochester, NY

Monroe County

www.foodlinkny.org

Specifics: Reusable/Salvageable (all food products, nonperishable food, surplus and hard to move inventory, inventory that can be eaten, but not sold)

Business Type: Reuse/Materials Exchanges

LOCAL MARKETS FOR SPECIALIZED RECOVERED RECYCLABLES

CLOTHING AND TEXTILES

Another Man's Treasure

221 S Main Street
Elmira, NY 14904
(800) 254-6119

Salvation Army (plus other various locations)

2502 Corning Rd
Elmira, NY 14903

Catholic Charities (plus other various locations)

215 E Church Street #100
Elmira, NY 14901

Habitat for Humanity

94 Carrollton Avenue
Elmira, NY 14905

ABVI Goodwill Donation Centers

http://www.abvi-goodwill.org/

Volunteers of America

http://www.voawny.org/

St. Pauly Textile Inc.
1067 Gateway Drive
Farmington, NY 14425
United States
Phone: (585) 292-0460
Fax: 585924-1538

HOUSEHOLD HAZARDOUS WASTE

Household hazardous waste (HHW) is waste that would normally be considered hazardous under DEC Part 371 regulations. Because it is generated in small quantities in homes, it is exempt from the hazardous waste regulations. HHW includes such products as oils, batteries (auto and consumer), solvents, cleansers, paints, fertilizers, and pesticides. It is not known how much HHW is generated in Chemung County each year, but waste generation studies generally attribute less than 1 percent of a county's waste stream to these materials.

Historically NEWSNY and Cornell Cooperative Extension have sponsored two (2) Household Hazardous Waste events per year. These HHW events are held in the months of May and October each year, and are funded by NEWSNY to encourage the responsible disposal of various household materials. Chemung County residents must pre-register for the event, but may participate without incurring any charges for disposal. Materials accepted at these events include, but are not limited to; oil-based paints, thinners, used oil, pesticides, herbicides, fluorescent light bulbs, etc. These events will continue to occur throughout the planning period.

Gas station owners are required to accept up to 5 gallons of waste oil a day from residential customers for proper disposal. The NYS Legislature passes Chapter 304 of the Laws of 1991 that restricts the amount and types of heavy metals in batteries in New York. The bill also establishes a schedule for setting up a collection system for recycling and disposing of household batteries.

- **Household Cleaners**: When hazardous cleaning products are disposed of in landfills, the chemicals they contain can seep into groundwater. Cleaning chemicals that are disposed of down drains also end up in the water system and others drift from the air where they are initially used into the air outside. Due to the various types of cleaning products, there are several methods for properly disposing of them. Household cleaning products that are hazardous should be properly disposed of by HHW facilities. The process that follows exemplifies the course of HHW, specifically cleaning products, through the disposal process:

    1. Trained staff members sort and categorize the materials by chemical class for proper storage. The HHW is typically classified as ignitable, corrosive, reactive or toxic. Cleaning products are categorized as corrosive or acidic alkaline.
    2. A contracted hazardous waste hauler collects the waste into drums, manifests the material, and transports it to different treatment facilities based on the type of the waste. Disposal locations are chosen based on the use of environmentally protective methods.

YARD WASTE

Based on a review of the August 2009 Yard Waste Infrastructure report and the table below above, there is a multitude of programs available to residents for organic waste management within the County. Six municipalities offer seasonal leaf pick up to their residents while eight (8) municipalities offer organic waste drop off locations for their residents to use.

Municipality	System In Place	Responsible Party	Destination	Municipality Needs[1]
Town of Ashland[2]	Residents can drop off yard waste 2 times per year at a designated location.	Town of Ashland	Chipped and offered to residents.	None reported.
Town of Baldwin[1]	The Town picks up branches following storm events and takes them to the fire department. They are stockpiled on-site for some time and then buried. The Town does not manage any other organic waste.	Town of Baldwin	Brush debris buried.	Christmas tree drop off program.
Town of Big Flats [1,2]	Offers an organic material (brush, yard/garden waste, grass clippings, leaves) drop-off facility located next to the Community Center Parking Lot (agreement with Black Gold). They also provide a Christmas Tree collection program during the holiday season. Town picks up brush from residents for 2 weeks in April or after storm events. Town offers curbside leaf pickup for 6-8 weeks in October thru December.	Black Gold	All materials are brought to the Town's compost site, processed through a tub grinder, placed into windrows for composting, and finished compost (unscreened) is available to residents.	Better organization of the compost site.
Town of Catlin[1]	Brush or branches can be dropped off at a Town location where they are ground into wood chips. No other organics are managed by the Town.	Resident's yards are large enough to manage their own yard waste.	Wood chips are either thrown back in the woods or residents can pick them up for landscaping needs.	None reported.
Town of Chemung[1]	Brush or branches can be dropped off at a Town location where they are ground into wood chips. No other organics are managed by the Town.	Highway Department	Wood chips are either thrown back in the woods or residents can pick them up for landscaping needs.	Interested in having a compost program town-wide.
Town of Elmira[2]	Drop off yard waste behind the Town Highway Department's garage Monday thru Friday. Utilized the County's tub grinder. Provide seasonal leaf and tree limb collection program twice per year.	Town Highway Department	Compost made available to residents, and the remainder goes to Black Gold.	Would like to see a centralized location for the County's tub grinder as opposed to it travelling from

Municipality	System In Place	Responsible Party	Destination	Municipality Needs[1]
				place to place. Would like the County to provide education door hangers to notify residents about composting.
City of Elmira[1,2]	Curbside leaf pick up is available in the fall and Christmas tree collection is available after the holidays. The pick-up is done with front end loaders. Vacuum trucks are used if necessary. The City offers a program (Dial-a-truck) where a resident can request a truck to be left at his property overnight for them to load the truck with organic waste. A City worker picks up the truck and delivers the organic waste to the city compost facility. The service cost is $35/use. The City also offers residents the opportunity to drop off their organic wastes (brush, yard/garden waste, grass clippings or leaves) at the City's compost site.	City of Elmira Department of Public Works	Materials are composted at the City's compost site. A tub grinder is used to grind the material into mulch. The mulch is put in windrows for composting and turned 3 times per year. The mulch is provided to residents or to Black Gold.	None reported.
Village of Elmira Heights[1]	Brush is collected for 2.5 to 3 weeks in April and after any emergency (ice storms, etc.). Christmas trees are picked up for 2 months (January-February). A wood chipper is used to create wood chips. Yard waste materials from residents are collected by the Village and combined with the Elmira Correctional Facility's materials and composted. In the winter, residents must handle their own yard waste materials. The village does not manage grass clippings.	Village of Elmira Heights, Elmira Correctional Facility	Wood chips are stockpiled at parks for residents to use. Yard wastes are combined with Elmira Correctional Facility's compost. Final use not reported.	Educating their residents.
Town of Erin[1]	The Town collects and chips the branches found along roadways after storm events. The Town does not manage other organic waste. Resident's yards are large enough to manage their own yard waste.	Town of Erin	Wood chips are left for residents to pick up.	Christmas tree collection program.

Municipality	System In Place	Responsible Party	Destination	Municipality Needs[1]
Village of Horseheads[2]	Drop off yard Monday thru Thursday (9am-3pm). Utilize the County's tub grinder.	Village of Horseheads	Not reported.	
Town of Southport[1,2]	Residents can take brush, yard/garden waste, grass clippings and leaves to an area near Southport Correctional Facility to be composted. A tub grinder is used to grind the material into mulch. The Town also picks up leaves only (no brush) for 6-8 weeks in October – December. Christmas trees are also collected for 2 months following Christmas day.	Town of Southport	Black Gold or residents.	None reported.
Town and Village of Van Etten[1]	Spring brush pick up event. Brush only, they do not take leaves.	Town of Van Etten	Brush is chipped and delivered to residents who request them.	None reported.
Town of Veteran[1]	Following emergencies, brush is collected and brought to the highway department for chipping. Typically they borrow the Town of Catlin's wood chipper. The Town does not manage any other residential organic waste.	Town of Veteran	Chipped wood is blown into the woods.	Creating a drop off location for organic wastes available to their residents.
Village of Wellsburg[1]	Yard materials are taken to an area near the ball fields where they are composted.	Town of Ashland or other municipalities	Town of Ashland handles with their organics program. Excess materials go to a farm field.	None reported.
Town of Horseheads[1,2]	Residential organic waste managed by Black Gold. The Town also collects tree brush/branches from the road, grinds them with a wood chipper, and generates wood chips. Wood chips and animal carcasses are composted together. The carcasses come from road kill and euthanized animals at the animal shelter. No other organics are managed by the Town.	Black Gold (residential) Town of Horseheads (brush, animal carcasses)	Yard waste is ground and sold as mulch. The compost generated from the wood chips and animal carcasses is not used.	None reported.

[1] Information presented in the August 2009 Yard Waste Management Infrastructure and Composting report.
[2] Information gathered by County personnel.

- **Leaves**: Leaf recycling is accomplished through composting, which produces an end product suitable for use as fertilizer or mulch.
- **Grass Clippings**: Grass clippings can be recycled back into the lawn so that the lawn will get the full benefit from the nutrients in the clippings. Bagged

clippings can be recycled by composting with MSW, sewage sludge, or other yard wastes.

- **Brush and Branches**: Brush and branches are recycled by chipping them into smaller particles for use as landscaping mulch or a bulking agent for MSW, sewage sludge, or yard waste composting.
- **Dirt**: Dirt is soil or earth waste resulting from excavation or demolition. Dirt waste is also produced by air filters in industrial plants and by household vacuum cleaners. Uncontaminated soil can be recycled as general or structural fill at a construction site or as daily or intermediate landfill cover. Contaminated soil can either be recycled for use as fill after decontamination via incinerator or as landfill cover, eliminating the need for excavation of new soil for use as cover.

ASBESTOS

Asbestos is defined by Part 360 as "friable solid waste that contains more than 1 percent asbestos by weight and can be crumbled, pulverized, or reduced to powder, when dry, by hand pressures". The material collected in a pollution control device designed to remove asbestos is also included.

Asbestos materials exist in residential, commercial, institutional, and industrial buildings. They can be found in surface materials, pipe insulation, wallboard, floor and ceiling tiles, and side shingles. Asbestos is considered a non-hazardous industrial waste whose disposal requires a Part 364 waste haulers permit for quantities above 500 pounds.

The disposal of asbestos is regulated by both the federal and state governments. The relevant federal regulations include the Occupational Safety and Health Administration – Title 29, Parts 1910 and 1926 and USEPA – 40 CFR Parts 762 and 61. New York State requirements include Parts 360 and 364 of Title 6, NYCRR and Rule 56 of the State Labor Code. The materials must be properly bagged according to 40 CFR Part 61, Subpart a and M, and 29 CFR Part 1910 and measures must be taken to prevent the asbestos fibers from becoming airborne.

Part 360 regulates the disposal of asbestos in landfills and acceptance at transfer stations. Contractors who remove asbestos from buildings are required to use a hauler with a Part 364 permit. Abatement projects must comply with NYS Rule 56 except for work done in an owner-occupied single family dwelling performed by the owner. These owners can place asbestos out with the trash provided it is double-bagged in plastic. DEC recommends that homeowners notify their waste hauler that asbestos will be in the trash.

SEWAGE SLUDGE

Municipal Wastewater Treatment Plant Sludge is a semi-solid or liquid waste generated from a water or wastewater treatment plant. Chemung County has three (3) wastewater treatment facilities (WWTFs). The Chemung County Sewer District is

comprised of two (2) WWTFs located on Milton Street and Lake Street in the City of Elmira. It is currently the practice of the District to only accept wastewaters generated within the County. The sludge, grit and screenings that are created during the treatment process are disposed of at the Chemung County Landfill.

LOCAL MARKETS FOR SPECIALIZED RECOVERED RECYCLABLES

BIOSOLIDS

Clifton Springs (V)
1 West Main Street
Clifton Springs, NY
Ontario County

Specifics: biosolids
Business Type: Part 360 Permitting Composting Facility
Amount of Material handled per year: 40 dry tons/year

Manchester-Shortsville
8 Clifton Street
Manchester, NY
Ontario County

Specifics: biosolids
Business Type: Part 360 Permitting Composting Facility
Amount of Material handled per year: 73 dry tons/year

Webster (V)
28 West Main Street
Webster, NY
Monroe County

Specifics: biosolids
Business Type: Part 360 Permitting Composting Facility
Amount of Material handled per year: 112 dry tons/year

LOCAL MARKETS FOR SPECIALIZED RECOVERED RECYCLABLES

BIOSOLIDS, CON'T

Mt. Morris
117 Main Street
Mt. Morris, NY
Livingston County

Specifics: biosolids
Business Type: Part 360 Permitting Composting Facility
Amount of Material handled per year: 70 dry tons/year

Ontario (T)
1850 Ridge Road
Ontario, NY
Wayne County

Specifics: biosolids
Business Type: Part 360 Permitting Composting Facility
Amount of Material handled per year: 53 dry tons/year

Sodus (V)
14-16 Mill Street
Sodus, NY
Wayne County

Specifics: biosolids
Business Type: Part 360 Permitting Composting Facility
Amount of Material handled per year: 20 dry tons/year

LOCAL MARKETS FOR SPECIALIZED RECOVERED RECYCLABLES

BIOSOLIDS, CON'T

Arcade (V)

17 Church Street

Arcade, NY

Wyoming County

Specifics: biosolids

Business Type: Part 360 Permitting Composting Facility

Amount of Material handled per year: 65 dry tons/year

Attica (V)

Village Hall, 9 Water Street

Attica, NY

Wyoming County

Specifics: biosolids

Business Type: Part 360 Permitting Composting Facility

Amount of Material handled per year: 180 dry tons/year

NON-HAZARDOUS INDUSTRIAL WASTE

Non-Hazardous Industrial Waste (NHIW) includes process waste and industrial sludge generated by local industries. In Chemung County, this waste stream comes largely from the food and wine industry in the form of sludge from treatment plants treating food processing wastewater and vegetable/filter process waste. Metal and paper plant sludge also comprise a portion of this stream. Food and wine process waste occurs primarily in the late summer and fall months, with lower levels generated during the winter season.

Appendix E

Example Compliance Report Outline

Chemung County
Local Solid Waste Management Plan

Compliance Report

Reporting Period:
January 1, 20XX - December 31, 20XX

February 20XX

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Appendix F

SEQR Determination

State Environmental Quality Review
NEGATIVE DECLARATION
Notice of Determination of Non-Significance

Project Number Date: July 13, 2015

This negative declaration is issued in accordance with Article 8 of the Environmental Conservation Law (State Environmental Quality Review Act).

The Chemung County Legislature located at 203 Lake St, Elmira, N.Y. 14901, as lead agency, has determined that the proposed action described below will not have a significant environmental impact and that a Draft Environmental Impact Statement will not be prepared.

Name of Action: Adoption of Chemung County Local Solid Waste Management Plan
SEQR Status: Type 1 ☒
Unlisted ☐

Conditioned Negative Declaration: ☐ Yes
☒ No

Description of Action: This action involves the adoption by the County of Chemung of a Local Solid Waste Management Plan pursuant to the requirements of Section 27-0107 of the New York Environmental Conservation Law

Location:
Chemung County, New York

Reasons Supporting This Determination:

The County, as Lead Agency, has reviewed the information provided in the EAF and supporting documentation in compliance with the guidelines set forth in 6 NYCRR § 617.7(c). The information contained in the EAF and the supporting narrative demonstrates that no significant environmental impacts will result from the adoption of this Local Solid Waste Management Plan.

For Further Information:

Contact Person: Michael Krusen
Deputy County Executive
Chemung County
203 Lake Street
Elmira, NY 14901

Telephone (607) 737-2031

For Type 1 Actions and Conditioned Negative Declarations, a Copy of this Notice is sent to:

Environmental Notice Bulletin, 625 Broadway, Albany, NY 12233-1750

RESOLUTION NO. 15-402

RESOLUTION ADOPTING NEGATIVE DECLARATION PURSUANT TO THE STATE ENVIRONMENTAL QUALITY REVIEW ACT FOR ADOPTION OF THE CHEMUNG COUNTY LOCAL SOLID WASTE MANAGEMENT PLAN

By: Woodard

Seconded by: Manchester

WHEREAS, the County of Chemung is the planning unit responsible for developing a Local Solid Waste Management Plan ("LSWMP") pursuant to Section 27-0107(1)(a) of the New York Environmental Conservation Law; and

WHEREAS, the adoption of an LSWMP is an action subject to the State Environmental Quality Review Act ("SEQRA"); and

WHEREAS, the County, as the planning unit responsible for developing and adopting an LSWMP is the appropriate agency to review the potential environmental impacts of the LSWMP pursuant to SEQRA; and

WHEREAS, there are no other agencies involved agencies within the meaning of SEQRA; and

WHEREAS, the Budget Committee has reviewed a Full Environmental Assessment Form ("EAF") for the LSWMP and recommends approval of this Resolution.

NOW, THEREFORE, be it

RESOLVED, that the County declares itself Lead Agency pursuant to SEQRA responsible for determining the environmental significance of the adoption of the LSWMP and finds that the adoption of the LSWMP is a Type I action under SEQRA; and it is further

RESOLVED, that adoption of the LSWMP will not result in any large and important adverse environmental impacts and, therefore, will not have a significant adverse impact on the environment; and it is further

RESOLVED, that the Chair of the Legislature, as responsible officer, is authorized and directed to sign the Full Environmental Assessment Form and indicate as the Lead Agency's Determination of Significance that a negative declaration will be prepared; and it is further

RESOLVED, the Clerk of the Legislature is hereby authorized and directed to file a Negative Declaration and Notice of Determination of Non-Significance consistent with the findings of this resolution and in accordance with the applicable filing and publication requirements of the SEQRA regulations at 6 NYCRR 617.12.

Ayes: Pastrick, Manchester, Sweet, Brennan, Miller, Hyland, Milliken, Woodard, Fairchild, Chalk, Collins, Madl, Strange, Draxler (Chair) (14); Excused: Jackson (1); Opposed: None; CARRIED.

STATE OF NEW YORK)
COUNTY OF CHEMUNG) SS:

THIS IS TO CERTIFY, that I the undersigned Clerk of the Chemung County Legislature, have compared the foregoing copy of resolution with the original resolution now on file in my office, and which was passed by the Chemung County Legislature on the 13th day of July 2015, a majority of all the members elected to the Legislature voting in favor thereof, and that the same is a correct and true transcript of such resolution and of the whole thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and the official seal of the Chemung County Legislature this 14th day of July 2015.

_____*Linda D. Palmer*_____
Linda D. Palmer, Clerk
Chemung County Legislature

Appendix G

Public Comments Received

From: Rick & Bette Ek [ek@stny.rr.com]
Sent: Monday, June 15, 2015 3:51 PM
To: Solid Waste Management Plan
Subject: SWMP

The inclusion of the proposed Chemung County landfill expansion in the County's draft SWMP is not only ridiculously contradictory to the goal of reducing solid waste, but also to what should be the goal of providing healthy and economically viable alternatives for current and future residents of Chemung County.

The draft plan as written portrays the landfill expansion as something of great importance to the economic security of the county. On page 78 of the draft SWMP the following statements appear:
"The proposed landfill expansion currently being contemplated will extend the life of the current landfill and provide **economic and environmental security** to the surrounding area in the form of preserving existing jobs, affordable waste disposal, **maintenance of a local economy income** and built-in environmental safeguards…….. **"The increase in tonnage accepted at the landfill will also provide additional revenue to the county and the Town of Chemung to provide further tax relief to the residents."**
I am greatly disturbed that, given the many serious concerns which have been repeatedly raised regarding the health impacts of the proposed expansion, these economic issues seem to be prominently weighted in the landfill expansion plan. I am also disturbed that minimal attention has been paid to ways of stimulating the county's growth in forward-looking ways that are safer, healthier, and likely to be more economically viable that those that rely on fracking infrastructure components such as fracking waste disposal. For example, it was recently reported that solar companies have been looking at Steuben County for possible sites for large scale solar projects. Steuben County Deputy Manager Jack Wheeler was quoted as saying "Aside from generating clean renewable energy, local solar projects would create construction jobs and would add to tax revenues for municipalities."
It sounds like Steuben County is inclined to encourage and welcome such initiatives. I'm not confident that Chemung County would be so inclined. An appointed group called the Chemung County Executive's Advisory Committee on Natural Energy Solutions began meeting in 2010. Perusal of the minutes of these meetings (it appears that the committee stopped meeting about a year ago) shows that very minimal attention was paid to any energy source other than fracking, at a time when renewal energy initiatives, with their accompanying economic benefits, have been growing at an extraordinary rate in the US and in other countries. Instead, the county's over-reliance in the past on anticipated revenue from PA fracking operations has led to a current decrease in funds available to the county's towns and villages. It seems we should have learned something from our past mistakes.
Besides avidly pursuing renewable energy sources such as solar and wind, the county should be exploring ways of developing its farming resources in ways that take advantage of the rapidly growing consumer demand for healthy, locally grown food. Last year the state announced a grant initiative favoring farmers, particularly new farmers, who choose organic approaches. Wouldn't it be nice if as a county we could develop leadership in this endeavor? There is a whole generation of young parents who are very committed to their children's health and who choose organic and locally grown food whenever possible. They are also concerned about finding safe and healthy locations to raise their families. Wouldn't it be nice for them to see Chemung County as an area known for healthy food, clean energy, and growing economic opportunities not linked to having a mammoth-sized landfill. Surely Chemung County could think about moving in a forward direction instead of making backward choices such as promoting an unhealthy mountain of trash as part of a 10 year plan for its future.
Bette Ek
235 Prospect Hill Rd., Horseheads, NY 14845

From: Leslie Potter [lesliepotter@hotmail.com]
Sent: Monday, June 15, 2015 4:07 PM
To: Solid Waste Management Plan
Subject: Comments on Local Solid Waste Management Plan

I would like the legislature, Casella, and the DEC to consider expanding the Household Hazardous Waste (HHW) program.

You are probably already aware that only a small percentage of Chemung County residents participate. The way the collection is set up discourages them from taking part. That's not to say they don't get rid of their hazardous waste, but it isn't being done safely. The cumbersome process of 1) learning that a twice-yearly collection is coming up; 2) calling Cornell Cooperative Extension to be allocated a time to bring one's HHW to the fairgrounds; 3) having to enumerate each item of HHW that's to be brought to the collection; and 4) waiting for an impressive but probably unnecessary number of human beings to unload cars and trucks after arriving at the collection.

I'm sure there are good reasons why the collection is so conducted, but it's hardly encouraging to people who might otherwise fully participate. What I propose is a trained volunteer corps (I would be one of those, and have been where we previously lived), with 3 or 4 people working 9 AM to noon every Saturday during the months of April through October. At least one of those working should be a county or Casella employee. Advance sign-ups wouldn't be necessary if a site dedicated to HHW were to be established (e.g., an accessible area that cannot be used otherwise because of brownfield designation) and open on such a regular basis. Possibly more people would be need the first and last collection days of this proposed schedule.

There would probably have to be a secure building on site to store the HHW until it is properly rerouted or disposed of. I'm not familiar with NY law as regards HHW disposal, so other considerations may apply. I'm just disappointed that a progressive eastern state such as New York is so lagging in HHW collection, whereas the county in western Kansas where we previously lived served a population of about 30,000 in the manner I've suggested.

Thank you for the opportunity to comment.

Leslie Potter
109 Main St.
Big Flats, NY 14814

Public Comments Received Via Email on the Draft LSWMP

From: Earl Robinson [chalecogus@aol.com]
Sent: Monday, June 15, 2015 9:18 PM
To: Solid Waste Management Plan
Subject: Draft Local Solid Waste Management Plan May, 2015

Comments on proposed plan:

1) Chemung County has a poor record of recycling despite the New York State mandate for same.

2) The current contract with Chemung County and Casella does not favor recycling but rather encourages landfilling.

3) The original contract between Chemung County and Casella allows Casella total control over recycling facilities and landfilling operations.

4) The contract between Cassella and the County sets a priority on "tons of landfilled waste", not tons of recycling therefore creating a disincentive to recycling.

5) The same group that developed and wrote the Landfill Expansion Plan wrote and developed the Local Solid Waste Management Plan. This is an obvious conflict of interest since they would naturally try to tie the two together and obviate any perceptible shortcomings or conflicts.

Earl P. Robinson, MD
1594 County Route 60
Lowman, NY
14861

Public Comments Received Via Email on the Draft LSWMP

From: Paula Kaartinen [pkaartinen@aol.com]
Sent: Sunday, June 14, 2015 10:03 PM
To: Solid Waste Management Plan
Subject: Solid Waste Management Plan

Paula Kaartinen
395 Crumtown Road
Spencer, NY 14883-9719

Re: Comment on Solid Waste Management Plan (SWMP)

Chemung County Legislators:

The plan to expand the Chemung County Landfill should be abandoned for these reasons:

•The SWMP intends to reduce total waste, therefore there is no need for expansion.

•The FEIS for the expansion had factual errors about radiation measurement and soil density that have been pointed out to the legislature.
The FEIS also failed to address potential watershed contamination caused by liner breakage and lack of proper treatment of leachate.
Radioactive material in drill cuttings causes water and air contamination that weren't thoroughly addressed in the FEIS. Contamination of the Chemung River affects not only drinking water, but recreational use of the river.

•People who live near landfills have been found to have higher rates of certain health problems than the general population. These include low birth weights and cancer. There is strong evidence of a cancer cluster in Lowman near the landfill. Health problems increase as a landfill's size increases. (Research references supplied on request.)

•The Hazardous Waste Loophole Bill S.884/A.6859, if passed, will end the importing of drilling waste to New York. If it is not passed, there will another law introduced with the same goal because there is a growing groundswell of support for keeping our water and air clean in NY. Without drilling waste, landfill expansion is inappropriate and excessive.

Paula Kaartinen
(607) 592-4239
pkaartinen@ aol.com

From: Pat Ladley [ladley@earthlink.net]
Sent: Sunday, June 14, 2015 8:45 PM
To: Solid Waste Management Plan
Subject: expansion of Chemung County Landfill

To Whom It May Concern:

I am concerned about the proposed expansion of the Chemung County Landfill that is part of the county's Solid Waste Management Plan (SWMP). I understand that in recent years, there has been a decrease in the amount of waste that is generated in Chemung County. And I see that the SWMP proposes to reduce waste even further. Why then is it necessary to expand the Landfill? Is it to accept waste from Pennsylvania's fracking sites? If this is so, I question the wisdom of this decision.

Also, I note that the Environmental Protection Agency fined Casella Waste Management (CWM)for multiple violations at the McKean County Landfill in Kane PA in 2014, including failure to maintain land area intended to prevent leachate from leaving lined disposal area resulting in leachate leaks. There were other problems with Casella management as well. This being the case, I question the wisdom of entrusting to CWM the expansion of its landfill in Chemung County.

Reduce waste in Chemung County; keep Chemung County landfill for Chemung County waste only; refuse waste from PA fracking sites; refuse waste that might in any way adversely affect the health and well-being of Chemung County residents, especially those persons living in close proximity to the landfill and those whose lives depend on water that is pure and uncontaminated by landfill leachate.

Thank you for your consideration,
Patricia Ladley, 26 year resident of Chemung County
Currently of 17 Penny Lane, Ithaca NY 14850

From: Margie Rodgers [margierodgers@gmail.com]
Sent: Sunday, June 14, 2015 6:03 PM
To: Solid Waste Management Plan
Subject: landfill

I have attended many of the meetings about the landfill expansion, and spoke at a few of them. I've been born and raised in Elmira, and like my father and grandfather, had a business for 20 years here. This is my home. I love it.
I am wholly, completely and unquestionably against the landfill expansion. What is Elmira going to be known for? Prisons and landfills? Isn't there another way that the powers that be in Chemung County help pull Elmira out of the dregs and start to do something we can be proud of?
Many articulate and educated people brought studies to the legislature that show the dangers of this landfill, especially since it is over an aquifer. I remember a young scientist from Cornell spoke of the impacts of this kind of storage and how it will affect children. Doctors spoke, radiologists, teachers, and people concerned about our community. There are more important things to consider before bringing in MORE fracking waste.
One of my greatest disappointments was watching each and every person on the legislature look at their phones, doodle pads and hands. NOT ONE PERSON addressed our concerns publicly or privately. Not one acknowledged our presence, but "tolerated" us. I overheard some men making fun of us and laughing at our concerns.
You must consider the long term affects of storing fracking waste here. It has a direct impact on the people living here. You are making a decision about MONEY and not about lives.
You must consider the long and sordid reputation that Casella has.
You really must consider what the residents want. I have not heard one person-other than a Casella employee- support this project.
There are more important things than money. Please consider the beautiful area you are dumping in.
Margie Rodgers
805 Larchmont Road
Elmira NY 14905
607 738 5232

From: Earl Robinson [chalecogus@aol.com]
Sent: Sunday, June 14, 2015 5:38 PM
To: Solid Waste Management Plan
Subject: Draft Local Solis Waste Management Plan

After reading the Draft Local Solid Waste Plan of May 2015 I have the following concerns:

1) Currently 28% of Chemung County MSW and 70% of Chemung County Construction and Demolition debris is transported to a location other than Chemung County Landfill. This reduces the need of a landfill ,in Chemung County by these percentages.
2) The population of Chemung County continues to decline and is projected to continue to decline reducing the need for a Chemung County Landfill.
3) The number of heavy industries in Chemung County have declined severely in the last 20 years further reducing the need for landfilling..
4) If the County embarks on a committed effort to recycle - there will be a significant further reduction in the need to landfill material.
5) If the County makes a committed effort to compost organic material and therefore not landfill this waste, not only will there be a significant reduction in waste material to be landfilled but there will also be nothing in the waste that is landfilled to produce Methane gas since Methane is produced by landfilled organic material. This would also obviate the need to buy a costly Landfill gas generator since its lifespan is tied to continued production of Methane.
6) A comment by one of the presenters at the May meeting indicated that he thought that having a lanfill as backup was appropriate - in case the recycling effort was not successful. I would offer that with no landfill, the County would be more interested in ensuring that it had a good recycling and composting program to reduce the costs of dealing with waste. In Tompkins County the Recycling Program pays for itself and they have no landfill having determined that is was more cost effective to ship that reduced volume of waste rather than having their own landfill.
7) As I mentioned at the May meeting, I think there should be a place in Chemung County to dispose of Batteries, used motor oil and oil filters.
This is hazardous waste and without a dedicated place to take it it is finding its way into our environment and is illegally dumped.

8) Electronic recycling is also made difficult and therefore encourages the population to dispose of these things in illegal way.

As noted above, if Chemung County commits the resources necessary to implement an aggressive Solid waste management plan there will be no need for a Chemung County Landfill, much less massive expansion .

Sincerely,

Earl P. Robinson, MD
1594 County Route 60
Lowman, NY.
14861

From: Gudrun Scott [gudrun.scott@gmail.com]
Sent: Sunday, May 10, 2015 5:01 PM
To: Solid Waste Management Plan
Subject: Re: [SIERRA-NY-GAS] Elmira Star Gazette: Proposed (Chemung Co.) landfill expansion included in 10-year plan

To the Chemung legislators, May 10,2015

Regarding Public Hearing on 10 year plan for Chemung landfill including modification of massive increase of tonnage.

There is insufficient notice:
One notice on May 4, 2015 at the Chemung legislature website -- that was 8 days before the meeting.
One newsarticle in the Star Gazette on May 8 2015 - 4 days before the meeting and that notice did not specify the date only the day of the week.

May I request more time to be prepared for a public hearing on this significant draft permit on the Chemung landfill that will last 10 years.

According to ECL permit law http://www.dec.ny.gov/regs/4483.html article 624.3 -" Notiices of Hearing" including draft permits require no less than 21 days notice. This notice was not in the ENB of the DEC in 2015 which is required by law.. According to law, the notice must be no sooner than 21 days before the meeting date.

This decision regarding the Chemung landfill 10 year permit is a significant decision: there is the possible modification to enlarge the annual tonnage. The decision done in 2010 by DEC Judge Buhrmeister was based on few samples that were not under chain of custody and provided by the applicant who would have a conflict of interest. Since that time a more comprehensive study was done The Tenorm Report of 2015 and the samples taken are more radioactive than the few samples that were gathered in 2010 without adequate chain of custody by the applicant who has a conflict of interest. The Tenorm Report also uses the definition of Tenorm that the EPA developed and which NY does not. The definition of Tenorm by Commissioner Martens on the August 4, 2011 decision requires a higher bar than the one that EPA and Pa are endorsing. Material that is processed or concentrated meets the definition of Tenorm and not that the materials needs both of those qualities-- only one of the two.

The decision regarding the ten year permit with or without modification will affect several other counties in the Southern Tier and we need more time and notice to travel to a public hearing that is several counties away from our residences. The current plan at Chemung is to not limit the drill cuttings at all going to one landfill per Commissioner Martens outdated decision on August 4, 2011.

If you decide to hold the meeting on May 12, 2015 , please videotape the hearing and post it on the internet to save on gas and still be informed and please post the materials that are used in the permit also on the internet.

June 15, 2015 is the current deadline for written comments and we need more time on that too-- May is full with graduations and weddings and school is out in mid June and family vacations are planed and any efforts of passing any bills in Albany is also on that deadline .

We need and deserve more time than June 15, 2015 for written comments.

Thanks for your consideration

Gudrun Scott RN
1759 Hawks Rd
Andover, NY 14806
607-478-8793

From: Karen Biesanz [karenb@stny.rr.com]
Sent: Monday, May 04, 2015 6:43 PM
To: Solid Waste Management Plan
Subject: Chemung County Solid Waste Management (SWM) Plan 2015

To the Legislators of Chemung County:

What bothers me about this 2015 SWM plan is that it does not acknowledge that the Chemung County landfill already accepts hazardous wastes, i.e. drill cuttings. On page 20 of the plan it says: "Non-hazardous industrial waste is typically generated by manufacturing facilities as a result of an industrial process and is made up of materials such as sludge, ash, drill cuttings and dust." But now we have proof that drill cuttings often contain radionuclide hazards which are dangerous to health. That proof is found in the the report called “Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM) Study” which was released in January, 2015 by the Pennsylvania Department of Environmental Protection. The public should be informed about this radioactive hazard and what the county intends to do to keep such waste out of the landfill.

Thank you for your attention in this serious matter.

Sincerely,

Karen Biesanz
215 Watauga Av.
Corning, NY 14830
(Elmira Property owner also)
karenb@stny.rr.com

Karen Miner
Chemung County Director of Public Information
203 Lake Street
PO Box 588
Elmira, NY 14902-0588

June 11, 2015

Dear Ms. Miner:

We are writing concerning Chemung County's draft Local Solid Waste Management Plan. Specifically,

We oppose:

- Plans to expand the Chemung County landfill to increase capacity from 180,000 to 417,000 tons. Expansion of landfill space to bury waste seems like a self-fulfilling prophecy that undermines in the long-run recycling, reusing, reducing. We ought to be aiming for *zero* landfill at some reasonable date in the near future.

- Importing garbage/waste from outside the County. We do not want our beautiful region of New York to be the garbage dumping destination for other communities who want to send *their waste away.*

- Allowing hydraulic fracturing waste to be brought into the County. If this is such a lucrative and safe activity, fracking communities ought to keep their own waste.

We support the County's plan to strengthen the recycling program, especially regarding composting, e-waste, and programs that promote the collection and distribution of items for re-use and repurposing.

Thank you for your kind consideration.

Respectfully,

Kathy and Tom Dubel
1682 Hogback Road
Lowman, New York 14861

Appendix H

Resolution Adopting Plan

RESOLUTION NO. 15-403

RESOLUTION ADOPTING THE CHEMUNG COUNTY LOCAL SOLID WASTE MANAGEMENT PLAN

By: Woodard

Seconded by: Manchester

WHEREAS, the County of Chemung is the planning unit responsible for developing a Local Solid Waste Management Plan ("LSWMP") pursuant to Section 27-0107(1)(a) of the New York Environmental Conservation Law; and

WHEREAS, on July 2, 2015, the New York State Department of Environmental Conservation ("NYSDEC") issued a letter stating that the current draft of the LSWMP constitutes an approvable plan; and

WHEREAS, the adoption of an LSWMP is an action subject to the State Environmental Quality Review Act ("SEQRA"); and

WHEREAS, the County Legislature, as Lead Agency, has determined that the adoption of the LSWMP is a Type I action pursuant to SEQRA and has made a Determination of Non-Significance and issued a Negative Declaration that adoption of the LSWMP will not have a significant adverse impact on the environment; and

WHEREAS, NYSDEC regulations at 6 NYCRR Section 360-15.10 contain several provisions that must be included in a planning unit's resolution to adopt a Final LSWMP, and such clauses are included herein by reference as required; and

WHEREAS, the Budget Committee has reviewed the Final LSWMP and recommends approval of this Resolution.

NOW, THEREFORE, be it

RESOLVED, that the Chemung County Final LSWMP is hereby adopted by the County Legislature as the solid waste planning unit for Chemung County; and it is further

RESOLVED, that as required by NYSDEC regulations at 6 NYCRR Sections 360-15.10, 360-15.11, and 360-15.12, the County will (i) evaluate and implement as it deems appropriate the solid waste management programs, projects and plans as identified in the Final LSWMP, (ii) submit LSWMP compliance reports to the NYSDEC every two years, (iii) submit an LSWMP modification to the NYSDEC when required, and (iv) submit updates to the approved LSWMP when required; and it is further

RESOLVED, that the Clerk of the Legislature is hereby directed to send notice of the availability of the Final LSWMP to adjacent solid waste planning units and will ensure that an electronic copy of the Final LSWMP is made available for public review on the County's website; and it is further

RESOLVED, the Clerk of the Legislature is hereby directed to furnish all items to the NYSDEC as indicated in the July 2, 2015, letter referenced above.

Ayes: Pastrick, Manchester, Sweet, Brennan, Miller, Hyland, Milliken, Woodard, Fairchild, Chalk, Collins, Madl, Strange, Draxler (Chair) (14); Excused: Jackson (1); Opposed: None; CARRIED.

STATE OF NEW YORK)
COUNTY OF CHEMUNG) SS:

THIS IS TO CERTIFY, that I the undersigned Clerk of the Chemung County Legislature, have compared the foregoing copy of resolution with the original resolution now on file in my office, and which was passed by the Chemung County Legislature on the 13th day of July 2015, a majority of all the members elected to the Legislature voting in favor thereof, and that the same is a correct and true transcript of such resolution and of the whole thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and the official seal of the Chemung County Legislature this 14th day of July 2015.

_____*Linda D. Palmer*_____
Linda D. Palmer, Clerk
Chemung County Legislature